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AUTHORIZATION OF THE ENDANGERED SPECIES
ACT OF 1973

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REAUTHORIZATION OF THE ENDANGERED SPECIES ACT OF 1973

TUESDAY, APRIL 3, 1979

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON RESOURCE PROTECTION,
Washington, D.C.

The subcommittee met at 9:10 a.m., pursuant to call, in room 5110, Dirksen Senate Office Building, Hon. John C. Culver (chairman of the subcommittee) presiding.

Present: Senators Culver and Chafee.

OPENING STATEMENT OF HON. JOHN C. CULVER, U.S. SENATOR FROM THE STATE OF IOWA

Senator CULVER. The committee will come to order.

We wish to welcome everyone to this hearing by the Subcommittee on Resource Protection regarding the reauthorization of appropriations for the Endangered Species Act of 1973.

Last fall, Congress approved the Endangered Species Act amendments of 1978 (Public Law 95-632) which extended budget authority through March 31, 1980 for the Department of Interior and the Department of Commerce to carry out their responsibilities under the act. Since this authorization expires during fiscal year 1980, the Budget Act requires the Committee on Environment and Public Works to reauthorize the Endangered Species Act by May 15.

The status of threatened and endangered species is no less serious now than it was in 1973 when the Endangered Species Act was passed. In fact, recent scientific studies show that conditions may have grown worse. In the Amazon Basin, for instance, which is possibly the biologically richest area of the world, thousands of species of flora and fauna continue to disappear as this unique area is cleared for timber and mineral development.

In the United States, progress has been made in the recovery of endangered plants and animals. Control of illegal commerce in alligator hides has led to a remarkable comeback for this species, and now in some areas of the country, the alligator is no longer endangered. Nevertheless, the dangers associated with continued habitat destruction are still very serious.

Consider, for instance, the California condor, one of this country's most outstanding endangered species.

A recent report produced by the National Audubon Society and the American Ornithologists Union on the status of the California condor states that, "The future of the California condor's habitat is

dim. Urbanization, recreation, and changing range-management practices are destroying the species' environment at a rapid rate."

The study concludes that no more than 40 of the mammoth creatures remain and that a drastic, now-or-never program of research, habitat and protection and captive propagation is the sole hope for saving North America's largest bird.

These examples clearly demonstrate that the goal of restoring depleted fish and wildlife populations has not yet been achieved. More than ever, we need a strong and effective program to protect our endangered species.

Congress last year approved major changes in the Endangered Species Act intended to provide balance and flexibility to a formerly rigid act, while still maintaining protection for species.

The Endangered Species Act amendments of 1978 created an Endangered Species Committee with the authority to arbitrate irresolvable conflicts. No project could be considered by the committee, however, until a review board had certified that the project agency had consulted in good faith with the Fish and Wildlife Service or the National Marine Fisheries Service and attempted to develop alternatives which would protect the species.

Although this new procedure has been in effect for only 4 months, preliminary indications are that it is working well and has had the intended effect of encouraging resolution of conflicts at an early stage of development.

We will talk this morning about procedures employed by the committee to consider exemptions for the Tellico Dam in Tennessee and the Grayrocks Dam in Wyoming.

There have also been administrative difficulties with the act, according to a draft report by the General Accounting Office, which identifies a number of alleged deficiencies in processes by the Fish and Wildlife Service in listing species, implementing species recovery plans, and consulting with other Federal agencies.

Since this report will not be complete until after the Fish and Wildlife Service has submitted its comments to GAO in May, the subcommittee this morning will address only those portions of the draft which pertain to the reauthorization of the act.

The information contained in the draft formed the basis for several provisions of last year's amendments, and so GAO has determined that no major amendments are necessary to correct the alleged problems identified in the draft report. This morning the agency will discuss, however, three perfecting amendments which they suggest that Congress might possibly consider.

As we all know, there is no return from extinction. We as inheritors and temporary custodians of the natural world, have a responsibility to protect the vast array of life forms entrusted to us, particularly when these may well hold the key to important medical and agricultural advances.

It is essential that we renew our dedication to the goal of protecting endangered species so that our Nation's disappearing fish, wildlife, and plants can be preserved for future generations.

Let us now turn to this morning's first witness, Hon. John Duncan, U.S. Representative from the Second Congressional District in Tennessee.

Congressman Duncan, it is a pleasure to have you here this morning.

I would like, before entertaining your testimony this morning, to ask unanimous consent that a statement by Senator Baker be included at this point in the record. Senator Baker very much wanted to be present this morning but an unavoidable emergency came up that necessitated his not being present at this time. I know he has had a continuing and critical involvement and interest in this whole general subject, and we look forward to working closely with him as we move forward on this reauthorization request. I would like his statement be inserted into the record at this point.

[Senator Baker's statement follows:]

STATEMENT OF SENATOR HOWARD H. BAKER, JR.

Hearings on the Reauthorization of the Endangered Species Act
April 3, 1979

I am pleased to be here this morning but must confess I remain perplexed with the implementation of the Endangered Species Act and with the outcome of our efforts of last year to inject some flexibility into this legislation. The recent decision of the Endangered Species Committee concerning the Tellico Dam completely ignores some basic factors which were of paramount importance to me when creating this decision-making body.

Going further Mr. Chairman, I would like to refer to a colloquy which you and I had with Senator Sasser regarding the Tellico project when considering the Endangered Species Act on the Senate floor last year. The exchange notes that when a project is on the drawing boards, a number of adjustments can be made in meeting the constraints of the Endangered Species Act -- project modifications, alternative proposals, and other options. But once a project is underway, then the options may become much more limited.

It was my opinion then and now that in a case where the project is underway, the exemption process should upgrade the emphasis on factors such as consideration of past financial investment, the commitments of local government and resources, the extent to which not exempting the project would be a detriment to overall area planning, and the availability of alternative habitats for the species in question. I don't believe the Endangered Species Committee followed this guidance in their review of Tellico. Let me give some examples.

In looking at the information on capital cost considered by the Endangered Species Committee in reviewing the Tellico case, some of the figures included in the staff report estimating the cost of completing the reservoir

alternative appear unrealistic -- almost to the point of being a deliberate attempt to bias this figure for purposes of comparison with other alternatives. I refer specifically to the \$14.2 million addition in the Committee's staff report which they indicate would have to be used for spillway reconstruction on the already completed Tellico Dam. It is my understanding that this additional sum would be used to redesign the present spillways to bring Tellico Dam in line with a new Bureau of Reclamation safety standard for dams. I certainly don't want to downplay the need for dam safety but it is my understanding that the Tellico Dam, as is the case with other TVA impoundment facilities, is already well above average as far as safety design is concerned. It should also be noted that this new standard, developed in response to the Teton Dam disaster, was never intended to be applied retroactively. But that is exactly what we are doing in the Tellico case. The Endangered Species Committee staff report seeks to impose this standard only on Tellico without any mention of what benefit such an action might be to the region in case of a flood. The fact is that little or no benefit would be derived from this additional construction unless other impoundments in the potential flood region are redesigned as well. I don't believe TVA feels such a wholesale redesign process at existing dams is necessary to adequately protect the citizens of the valley. This being the case, there seems to be little or no reason for the use of this additional figure in the Committee's comparison of alternatives at Tellico. But it was used and I am sure had a sizeable impact on this comparison.

In further reviewing the report of the Endangered Species Committee, I find little was done to address the needs, desires, and past commitments of local governments within the Tellico project region. The staff report, while recognizing the overwhelming desire of the local people to have this project

completed as proposed -- a survey of 13,046 persons in the project area indicated that 82 percent were in favor of completion -- seemingly ignores this fact in the chapter concerning regional development. In this chapter, the staff simply notes that certain national policy may sometimes favor efforts by the Federal government to increase employment and income in certain regions at the expense of other regions. Does this mean that because of our decision on endangered species it is now acceptable for the Tellico region to continue to be plagued by the problems that generated the need for this project. I hope this is not what was intended but nevertheless, it appears that pursuant to this broad generalization the years of planning for and commitments made to the Tellico project which evolved in response to some specific needs in the area -- such as the need for employment, the need to reduce outmigration of young people and other similar economic factors -- were ignored by both the staff and the Committee. I don't believe this is what Congress intended in the exemption process which they created last year.

Another factor of importance to me that was given little if any status in the Committee's review process is that the snail darter seems to be doing very well in habitats outside the Tellico River. The transplanted population of these fish in the Hiwasee River, a river similar in many ways to the Tellico, may in fact be much larger and in a better position to survive than that which now remains in the critical habitat which is blocking the completion of the dam. In cases such as Tellico where the project is completed or well underway, it only makes sense to elevate the status of this type of information in the process of reviewing for an exemption. It certainly was not done in this case -- and that greatly distresses me.

In summary then I would like to say that the Endangered Species Committee's interpretation of what facts are important, and the amount of

emphasis that should be placed on these factors in reviewing a case such as Tellico are certainly not in accord with mine and probably not in accord with those of the Congress -- remember the House granted an outright exemption for Tellico last year. It is clear to me that a different standard of review would be necessary in cases where the project was at a higher stage of completion. The misconstruction of Congressional intent on this matter by the Endangered Species Committee coupled with their completely overlooking the fact that the snail darter in all likelihood could, with just a little effort, be adequately protected and maintained elsewhere, led to a faulty decision on Tellico and one that will be a bad precedent in all cases where the species is found after the project is substantially underway. I think it fair to say that the Congress expected last year's amendments to add enough flexibility to the Act for Tellico to be exempted. This does not seem to be the case.

With this in mind, I have introduced legislation to specifically exempt Tellico and hope that this Committee and the Congress will give it favorable consideration.

STATEMENT OF HON. JOHN DUNCAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. DUNCAN. Thank you, Mr. Chairman.

Senator CULVER. We are very happy to have you come before us. It was a pleasure to serve with you in the House for many, many years. I am delighted to see you today and we look forward to hearing from you, sir.

Mr. DUNCAN. I appreciate being here. It was a pleasure to serve with you, and the fact you still represent my wife's people up in Iowa in a very good manner.

Mr. Chairman and members of the subcommittee, I appreciate the opportunity to appear before you today to discuss the reauthorization of the Endangered Species Act, and a project in my congressional district that has been affected by that act; TVA's Tellico Dam and Reservoir project.

The case is well known, but I think a brief review of the facts is necessary to illustrate the folly of this unfortunate situation.

I am going to summarize my statement, if I may, if it will become part of the record in its entirety.

Senator CULVER. Without objection.

[See p. 53.]

Mr. DUNCAN. TVA first proposed the construction of Tellico Dam in 1936 as part of its overall plan for the Tennessee River system. Its value has always been as an extension that supplements the operation of the larger Fort Loudon Dam nearby.

Funds for the construction of Tellico were first requested in 1942, but wartime financial pressures necessitated postponement. In 1963, the need for the Tellico project as a Fort Loudon extension was again realized.

During 1965 and 1966, the Congress held hearings on the proposal and because of the community support for the dam and the merit of the proposal, funds were appropriated by every succeeding Congress. In fact, that was during my first term in the Congress.

At that time, only three people from Tennessee appeared in opposition to the dam but planeloads and busloads of people from throughout the area came up in support of the project.

Construction began in 1971. Congressman Joe Evans was one of the leaders in getting the funds approved. Then we proceeded as planned and briefly halted in 1971, because of legal matters. The objections raised at that time was a suit over the proper drafting of an environmental impact statement. The objections were satisfied and construction resumed in 1973.

That same year, the Endangered Species Act became law and 2 years later, it was used to halt the construction of Tellico Dam.

In October 1975, the Fish and Wildlife Service listed the snail darter as an endangered species. I think it was a hoax to begin with, because the snail darter is not only alive and thriving in other streams, but the TVA testified there is more in the Hiawassee River now living and that have reproduced than there are in the Tellico River.

It has also been alleged that the Tellico has been a free-flowing river, which is not true, and it never has been since back in the 1920's, when the Aluminum Co. of America built their dams.

The merits of the project, I think, are just as valid today as they were in 1936. It not only provides flood control but also provides electricity for 20,000 homes. That may not sound like a great deal, but it is a lot when we are looking for different energy alternatives.

The House last year had an exemption for the Tellico Dam and it passed by, I think, 76 more votes than were needed near the end of the term. Then it went to conference in the House and Senate and it was then decided that it was acceptable that the Tellico project, together with one in Wyoming, would be considered early by the new Endangered Species Committee. Since Congress passed the Endangered Species Act, however, there have been more developments in the case. As I said, Tellico is one of the projects given expedited review by the Endangered Species Committee as created by the act, which President Carter signed into law on November 16. But the act provided that the committee must begin its consideration within 30 days of the act becoming law and by December 10, the committee was not yet organized.

In fact, had my office not contacted the Interior Department, the committee might not have organized at all because, in fact, it wasn't until December 11 that Gov. Ray Blanton finally submitted the name of five nominees to President Carter for his selection. And bear in mind it was not until January 10 that the Tennessee representative was appointed. This was actually after a public hearing had been held in Knoxville when the Tennessee representative was appointed. And we understand that some members of the Endangered Species Committee were not given a copy of the record that was made in Knoxville at the public hearing because there wasn't time by the time they were appointed until a decision was made.

The people still want the project. In fact, every legislature that has met in recent years has indicated they would like to see the project completed. In fact, in Tennessee, the house of representatives voted unanimously, I understand, for completion of the dam. And then the State Senate, with little or no opposition, also requested that the Congress exempt the dam.

I don't think the committee operated in a proper or a lawful fashion in considering the Tellico Dam, and I think President Carter has always supported it, all the Presidents have supported it. It was in the Carter budget. It was never on his hit list. The people want it, and I think the Congress many times has indicated that.

I would like to pass this picture up to the chairman and show you just how far the dam is complete. The media has supported it in our area. In fact, one newspaper said if we don't complete it, we ought to build a good road up to it and put a plaque on it to the stupidity of the Government. But that, in brief, Mr. Chairman, if I may just say, I would like to see somewhere in this bill—and I am not here to gut the Endangered Species Act—an exemption for the Tellico project.

The deck was stacked on the committee because Secretary Andrus, requested of the President who should be named from Tennessee on the committee. Of course, Secretary Andrus was opposed to the project also. We think we should have a simple majority on the committee instead of five out of seven. If we must approve an exemption, that is almost an impossibility in the present day. I would highly recommend that the number be changed to a simple majority, because we knew that when we went in with that committee, the way it was constituted, that they would not exempt the Tellico Dam under those provisions.

We think we ought to carry out the wishes of the Congress and exempt the Tellico Dam and I am sure the House will, again, as they did last fall, overwhelmingly approve exemption if it comes from this side.

Thank you very much.

Senator CULVER. Thank you very much, Congressman Duncan. Senator Chafee?

Senator CHAFEE. I apologize for being late, Congressman Duncan.

Could I ask you, as I understand your recommendations on the exemption committee are to change it to a majority vote in addition to exempting this.

Mr. DUNCAN. Yes, sir. I don't think that it is workable with a five out of seven must approve an exemption. We usually operate our Government by majority vote. We were aware of the fact with the makeup of the committee and the outward opposition of the Secretary of the Interior that we didn't have a chance.

Senator Sasser and Senator Baker have a bill to exempt Tellico now pending in the Senate. Congresswoman Marilyn Lloyd Bouquard and I had it last year and were successful with it. It is pending here. But I think, perhaps, if the project had never started, I don't think I would be here today. But it is something that we have asked for, the people have been promised the dam. We have taken their land and the roads are torn up.

They cannot go back to their land. They have gone to other areas of the State and bought land. They have spent their money and they cannot buy their land back from the TVA. Great emphasis has been put upon Indian burial grounds. Well, the University of Tennessee has said TVA has gone further than anyone in restoring the area.

The burial grounds were nothing but corn fields until one man went to North Carolina and stirred the Indians up a little and they decided to oppose the dam. It is something that we don't understand. I mentioned our legislative body of Tennessee Thursday and Friday, both Houses—I understand without any dissent—asked for approval for completion of the project by resolution to this body. And we think it is the fair thing to do.

I think it was a hoax to begin with. There are 200 varieties of darters. We don't think it should have been put on. I guess all of us were asleep and not realizing the fact that the tiny fish, which I have used for bait in the streams of east Tennessee for many years. And they have now been transferred over into the Hiwassee River and I think at last count they had 3,600 living and thriving and reproducing in the Hiwassee River but only about 600 in the Tellico.

Senator CHAFEE. Thank you very much for coming. We appreciate it.

Senator CULVER. Thank you, Congressman Duncan. We appreciate it.

We will now have a panel of witnesses—Mr. Terry Leitzell, Mr. Robert Herbst, Mr. Lester Silverman, and Mr. Henry Eschwege.

If you will all come forward. It is a pleasure to have you and to welcome you here this morning.

Mr. Herbst, would you be good enough to lead off.

STATEMENTS OF ROBERT L. HERBST, ASSISTANT SECRETARY FOR FISH, WILDLIFE, AND PARKS, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY: LYNN A. GREENWALT AND HAL O'CONNOR; TERRY LEITZELL, ASSISTANT ADMINISTRATOR FOR FISHERIES, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE; LESTER P. SILVERMAN, DIRECTOR OF THE OFFICE OF POLICY ANALYSIS, DEPARTMENT OF THE INTERIOR ACCOMPANIED BY: ROBERT DAVIS AND JOHN TREZISE; HENRY ESCHWEGE, DIRECTOR, DIVISION OF COMMUNITY AND ECONOMIC DEVELOPMENT, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY: ROY KIRK AND CHARLES COTTON

Mr. HERBST. I would, like to introduce Mr. Greenwalt and Hal O'Connor, acting associate director for Federal Assistance which, in effect, supervises the endangered species program.

Mr. Chairman, it is a pleasure for us to be here to testify on and behalf of the authorization to extend the endangered species program and also to thank you for your leadership on the program as well.

I would ask that my entire testimony as printed be placed in the record, along with the attached editorial to that testimony.

Senator CULVER. Without objection, so ordered. [See p. 73.]

Mr. HERBST. Mr. Chairman, it is a pleasure for me to be here today to testify on authorizations to extend the endangered species program.

At the outset, I believe it would be helpful to put the act into a historical context. In a day where it is almost impossible to read the newspaper without seeing the term endangered species applied to everything from corner grocery stores to the family farm, it is hard to believe that prior to 1966, the number of people who were concerned about endangered species was small and limited mostly to biologists and members of conservation groups. Since the first Endangered Species Act was signed in 1966, the program has been subject to three major legislative revisions.

The first act, passed in 1966, staked out some important principles, but provided little substantive protection for endangered species. It directed the Secretary to draw up a list of native fish and wildlife found to be threatened with extinction.

It also directed three Cabinet-level departments to "seek to protect endangered native species." However, these Federal departments were asked to preserve habitats of such species on lands under their jurisdiction only insofar as it was practicable and consistent with their primary purposes.

Finally, it authorized the expenditure of funds from the Land and Water Conservation Fund to acquire habitat for listed species. Three years later Congress passed a law putting some more teeth in the program.

The Endangered Species Conservation Act of 1969 made a number of critical definitional changes, and most importantly, banned the importation of endangered species, a move to close the United States as a marketplace for endangered wildlife. In addition, Lacey Act coverage was expanded to allow for the control of interstate traffic in endangered species parts and products.

Under the 1969 act, the Service could conduct programs for enhancement and recovery of listed species and our programs could also include public education and technical assistance—but not funds—to foreign countries.

The Endangered Species Act of 1969 was seriously flawed by the requirement that a species be in danger of worldwide extinction before it would be put up on a list. Nonetheless, the act was a big step forward. It established the principle that trade in and movement of endangered species should be regulated and set up a basic mechanism to accomplish this.

During the years between 1969 and 1973, public interest in bolstering the act grew, mainly as citizens became aware of a critical fact that wildlife biologists had known for years—that to protect a species in the wild, it is necessary to protect its habitat. Widespread concern about rampant habitat destruction was translated into a new purpose expressed in the beginning of the 1973 act: " * * * to provide the means whereby the ecosystems upon which the endangered species and threatened species by be conserved * * * " To protect habitat, the act contained what may be the two most controversial sentences in the history of the conservation movement, the short paragraph known to everyone simply as section 7.

That section contained two Service responsibilities that now constitute a major part of the Service's endangered species program—consultation and the designation of critical habitat.

The first concept, which requires agencies to consult with the Secretary to insure that proposed projects do not jeopardize endangered species or adversely modify critical habitat, has involved the Service in thousands of decisions relating to development projects.

Many others, and this is the true value of the consultation process, have undergone modifications, often quite minor, that have allowed species to survive and projects to continue. A very few projects have been stopped.

The second concept, critical habitat, goes directly to the conviction that habitat is the key to conserving endangered species. The designation of critical habitat has also become a major part of the program, and 33 such habitats have been listed.

The 1973 act also substantially changed the listing process, allowing the listing of distinct populations of species endangered in the future. The act also expanded the authority for recovery programs, made the taking or harvesting of endangered or threatened species a Federal offense, established a program of grants to States, and made the United States a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Since 1973, there has been considerable progress made in protecting threatened and endangered species. In 1973, there were 49 whooping cranes in the wild; there are now 84. In the same period, the Aleutian Canada goose population has gone from 700 to 1,500; the everglade kite population from 47 to 160, and the Puerto Rican parrot population from 12 to 28. The timber wolf has also increased in the last decade.

The populations of some species which were declining have stabilized. These include the bald eagle, peregrine falcon, Attwater prairie chicken and Kirtland's warbler.

We have also had a number of disappointments. Despite our efforts, the California condor population continues on a slow decline, decreasing from 40 in 1973 to less than 30 today. The red wolf is now probably extinct in the wild; although initial experiments in reintroduction have given us some reason for optimism. The dusky seaside sparrow has gone from approximately 650 in 1971 to 24 today.

During this period there has also been some controversy. We have been accused by some of using the act to stop projects. And by others of not listing species that might stop projects. We have been charged, sometimes by the same people, both of being politically naive in listing species and not listing species for political reasons. We have gone too slowly for some and far too fast for others.

Amidst the controversy, we have listed over 600 species, 197 of them domestic. Critical habitat has been designated for 33 species. We have developed and are implementing recovery plans for 19 species. There have been over 800 formal consultations, thousands of informal consultations, 4 major court cases, and 1 Supreme Court decision. In 1978, the act was amended again. In three of the major components of the endangered species program—listing, consultation and recovery—major changes have been made.

In our view, the changes in the listing process and the designation of critical habitat are perhaps more significant than the creation of the exemption process. Listing species of plants and animals as endangered or threatened and designating their critical habitat is the most basic function of the endangered species program, since species must be listed before they can receive the protection and other benefits afforded under the act.

New section 4 regulations have been drafted and are now proceeding through the departmental review process. These regulations will include provisions for publication of critical habitat and listing proposals in scientific journals and in local newspapers and provisions for public hearings and meetings.

One of the changes made by the 1978 amendments and which will be addressed in the regulations is the requirement that we consider economics and other factors prior to designating critical habitat. Previously, we were limited to addressing the biological needs of the species.

Efforts are now underway to develop the process needed to fulfill this mandate for the many species needing habitat protection. Secretary Andrus has directed that an option paper be presented to him by April 6, 1979, outlining alternative procedures for considering economic impacts in critical habitat designations.

On March 6, 1979, we formally withdrew all pending proposals to designate critical habitat in order to carry out the procedural requirements mandated by the 1978 act. At the same time we announced that proposals to add some 2,000 species, largely plants, to the list will not be made final until the proposals have been supplemented with additional information.

The 1978 amendments also require us to review all of the listed species at least every 5 years to determine if any change in status is warranted. We are now making preparations to conduct the first such review which will address all those species listed up through 1974.

The consultation process has been substantially strengthened by the 1978 amendments. We are now more directly involved at the initial stages of Federal planning, providing lists of species in the areas of proposed activities, and advising agencies as to the need for consultation. A concerted effort is being made to keep abreast of Federal agency actions to insure that consultation is initiated at the earliest possible time, thereby reducing delays in agency actions.

We are working with other Federal agencies on the new section 7 requirements. Specialists from our Washington and regional offices have met with representatives of dozens of Federal agencies during the past several months to discuss new consultation procedures and apprise them of the newly established exemption process.

We are also attempting to speed up the consultation process. Once consultation is initiated, special teams are often appointed to conduct a prompt and thorough review of the potential impacts of proposed Federal activities.

Upon the completion of consultation, our biological opinions are taking a different form, now detailing any anticipated impacts of projects on listed species, addressing cumulative effects, and de-

scribing reasonable and prudent alternatives to agency actions that would avoid jeopardy to listed species or their habitats.

A working group of representatives from our service, the National Marine Fisheries Service and our departmental Solicitor's Office has drafted regulations to put us in compliance with new section requirements.

In accordance with new requirements of the 1978 amendments, recovery plans must now be prepared for all species that will benefit from recovery activities. To meet this goal, our regional offices are formulating recommendations on recovery needs for individual species, methods of plan preparation, appropriate time frames, and coordination of land acquisition and research. All recovery plans will be prepared in line with priorities such as degree of threat, recovery potential, and taxonomic status.

Recovery teams are being appointed for those species for which it appears advantageous, whereas other plans will be prepared through contractual arrangement, or by Service experts and other specialists. During March, we conducted a workshop to discuss our recovery planning guidelines, and expect to complete them very soon.

During fiscal year 1978, 9 new recovery plans were approved, bringing to the total to 19 completed plans; another 51 plans are in various stages of development. In all more than 60 recovery teams have been appointed to chart recovery plans for 75 listed species.

Mr. Chairman, we will continue, as we have in the past, to do our best to implement all of the provisions in the act and carry out the strong congressional mandate to preserve endangered species. We do not expect any appreciable reduction in the amount of controversy that will surround this program. We will do our best, through the consultation process, to avoid conflicts between endangered species and projects, and we will continue to remind people that the purpose of the act is to protect rare animals and plants—not stop projects. But inevitably, conflicts will arise, and regardless of the result of the exemption process, there will be those who will argue for special exemptions or that the Act itself should be gutted.

The temptation to do so is often very great, as the match ups often appear to some people to be outwardly ludicrous—eagles versus refineries, kites versus powerlines, a 3-inch fish versus an 8-foot dam—until one realizes that the species protected are part of the fabric of life itself.

To preserve endangered species is to maintain genetic diversity in a world growing increasingly monotypic, to preserve the biological support system that ultimately supports man himself, and to protect unique and often valuable life forms against the awesome finality of extinction.

Mr. Chairman, the administration has requested that legislation be introduced that would authorize \$19,332,000 to be appropriated for fiscal year 1980, and such sums as may be necessary for fiscal years 1981 and 1982. Consequently, as in the past, priorities will be established within the program to best utilize our resources and provide protection for the most critically endangered species. With regard to the bills introduced to abolish the exemption process and exempt the Tellico and Columbia Dams from the provisions of the

act, we defer to Mr. Silverman, who is representing the Secretary here today on matters regarding the exemption process.

As you know, I recommended to the Secretary and he concurred that the staff for this function not be in the Fish and Wildlife Service but in fact attached to his Department, which it is now.

Before I close, I would like to comment on the draft report of the Government Accounting Office which, as you know, is critical of the operation of the endangered species program. While there are some valid criticisms in the report, most of the findings, and hence many of the conclusions, are simply inaccurate. We are preparing a detailed response to the draft report that will be sent to GAO next week.

I am sincerely concerned that the premature release of the draft GAO report without adequate agency consultation calls into serious question the purpose and intent of the report and hampers an objective and accurate evaluation of the program.

I am quite certain that if GAO objectively reviews our detailed and factual response to their proposed draft report, the final report will be substantially changed and far more favorable to the program.

That concludes my prepared testimony. We will be happy to answer any questions you may have.

Senator CULVER. Thank you, very much, Mr. Herbst.

We would like to have the testimony from Mr. Leitzell at this point and then we can, ask questions of both of you.

Terry Leitzell, Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration, Department of Commerce.

STATEMENT OF TERRY L. LEITZELL

Mr. LEITZELL. Mr. Herbst has covered a number of things in my testimony and I would like to ask if I could summarize my testimony and have it then put in the record.

Senator CULVER. Without objection, so ordered. [See p. 85.]

Mr. LEITZELL. I am pleased to appear before the subcommittee to discuss the proposal to extend the authorization for appropriation to carry out the Endangered Species Act of 1973. Effective implementation of the act is vital to the survival and enhancement of populations of those species of fish, wildlife, and plants that are either endangered or threatened with extinction. The authorization for general appropriations will expire on March 31, 1980, and we feel it must be extended for the Federal Government's endangered species conservation program to continue.

The Department of Commerce recommends extension of appropriations authorization to the Department of Commerce in the amount of \$2,420,000 for the full fiscal year 1980 and for such sums as may be necessary for fiscal years 1981 and 1982. Fiscal 1980 represents the budget request that we have submitted to Congress for that fiscal year.

The National Marine Fisheries Service of the National Oceanic and Atmospheric Administration is responsible for developing and maintaining conservation programs for fish, wildlife, and plant species of the marine environment. Various species of whales,

seals, sea turtles, and sturgeons are presently threatened with extinction.

The Endangered Species Act, as Mr. Herbst mentioned, placed increased responsibilities on the implementing agencies. We are now working to implement those responsibilities within NOAA and the National Marine Fisheries Service and believe all those improvements to the act will improve and cause a smoother implementation of its requirements. Our fiscal 1980 budget request submitted to Congress shows a net increase of approximately \$125,000 over our base program for endangered species conservation. We are asking for increases of approximately \$619,000 and decreases in low-priority programs of \$494,000.

Senator CHAFEE. Have you got a percentage increase in that? What did that net out to as a percentage increase?

Mr. LEITZELL. The percentage increase is relatively small. The base budget is about \$2.4 million and our net increase is about \$125,000. It is relatively small, although it is partly a question of moving programs from lower priority to higher priority programs.

Senator CHAFEE. So that is about 5 percent, isn't it?

Mr. LEITZELL. I am not very good at that sort of thing.

Senator CHAFEE. If your base budget is \$2.4 million, I suppose 10 percent would be \$240,000?

Mr. LEITZELL. Yes, that is right. It is about 5 percent.

Senator CHAFEE. You are about half of that, so that is about 5 percent?

Mr. LEITZELL. That is correct.

Senator CULVER. I am glad none of us have to take the college aptitude test.

Mr. LEITZELL. I am just like my children. Without my small calculator, I cannot do these things anymore, even though I did learn once.

Our base programs are essentially divided into three major categories. One is general administration of our program, which is run here in Washington and through a number of our field stations; our enforcement program, which takes place mostly in the field, although we do have people here working on that; and a fairly large endangered species research program. Our research efforts are presently focused on endangered and threatened sea turtles, endangered whales and seals, and we have established recovery teams, both for sea turtle and for the short nosed sturgeon. Our sea turtle research program, which is a large part of our program now, is focusing on developing excluder panels for shrimp trawls to reduce the incidental catch of sea turtles. We have found recently that many of the endangered and threatened sea turtles are independently caught in shrimp trawls while the shrimpers are fishing. And we are trying, at the urging both of the shrimp industry and environmental industry, to develop gear that will keep the turtles out of the nets while still permitting the shrimp industry to continue with its fishing.

Senator CHAFEE. That must be the trick of the week with a measure that is fine enough to get that shrimp, to let something escape from it, a turtle, selected escape hatches.

Mr. LEITZELL. We have wonderful charts and slides which I could have brought. What we are doing right now is to try to develop a

panel of net which would fit on the front of the trawl essentially to push the turtles up over the trawl while letting the shrimp go through and be caught by the finer net. It has produced an incidental benefit to the shrimp industry, which now catches about 11 pounds of fish which they consider trash for every pound of shrimp. So they may get extra benefits in addition to avoiding catching turtles. I would say that the industry has been quite cooperative with us in working on a testing program and in working on programs to help to deal with turtles which do get, incidentally, caught to make sure they are returned to the water alive.

We are also doing research on seals, although there is a slight decrease in that activity in fiscal 1980. But that is partly because some of our ongoing efforts are completed and we will be continuing to monitor current population sizes and trends of the hawaiian monk seal and guadalupe fur seal.

We are making a relatively limited budget request under the Endangered Species Act for endangered whales. They are all protected and included under the Marine Mammal Protection Act of 1972, and we use both acts as sources of funds to work on those whale populations.

Included in our research are stock assessment programs on humpback whales, observer programs and a number of activities recommended by the International Whaling Commission for the International Decade of Cetacean Research. We are also working on research on the bowhead whale, which is of considerable interest because of the subsistence harvest which takes place on the North Slope of Alaska.

Also, as I mentioned earlier, we have already established two recovery teams, one for the endangered short-nose sturgeon, which is the only marine fish presently on the endangered species list, and for the six species of threatened and endangered sea turtles.

Finally, we are in the process of proposing the listing of three other marine species—one, the totoaba, which is a large croaker-type fish from Mexican waters of the Gulf of California; two, the caribbean monk seal, which we want to list, although we think, in fact, it may already be extinct, but we would like to be sure if there are populations in any isolated localities in the Caribbean, they are protected; and, finally, the guadalupe seal, which occurs in rather low numbers in the Channel Islands off southern California.

The subcommittee did request that I comment on behalf of NOA with regard to the legislation for exemptions on Tellico Dam and Grayrocks Dam and on the general activities being undertaken by the Endangered Species Committee.

As you know, the Administrator of NOAA was personally named as one of the members of that committee, and we and the Office of General Counsel in NOAA do the staff work for him in preparing for those activities.

We feel that the amendments enacted in November of 1978 are important additions to the act and we are firmly committed to their implementation. We think that the recent actions of the Endangered Species Committee do reflect the desire of Congress that all conflicts be resolved after a thorough evaluation of all relevant biological, social, and economic criteria. The committee

considered both the Tellico project and Grayrocks project and rendered what we believe to be appropriate and desirable decisions in light of the standard established by the 1978 amendments to the act. We believe that the committee should be continued and we would oppose statutory exemptions from the act for the Tellico project or for the Columbia Dam and Reservoir project.

I might make a final note that we, too, are involved in international activities in addition to the International Whaling Commission, which I have mentioned, and the Convention on International Trade, which was mentioned by Mr. Herbst. We are seeking to carry out those activities and our domestic responsibilities in a fair, comprehensive, balanced and expeditious manner. We believe extension of appropriations authorization to the Department of Commerce is important and necessary if we are to continue to carry out those responsibilities.

Mr. Chairman, that concludes my testimony. I would, of course, be pleased to answer any questions you or others on the subcommittee may have.

Senator CULVER. I wonder at this time if we might just pose some questions to Mr. Herbst and Mr. Leitzell and then we can go on to the other witnesses.

I wonder if both of you gentlemen would respond to the first question I have.

As you indicate, the 1978 amendments mandate some additional responsibilities essential to both of your administrative units, and you have really asked for only a very modest increase in your fiscal year 1980 authorization.

I realize the whole budget austerity climate under which we properly are operating this year more than ever before. But I was interested in knowing whether or not in your judgment those requests will permit you, nevertheless, to meet the new mandates that have been set up.

Mr. HERBST. Mr. Chairman, for the Department of Interior, as you know, the President's budget for 1980 is an austere one, and the figure that we have recommended for funding the endangered species program reflects that.

It is, however, an increase of \$400,000, which is one of the very few programs, in fact, in our budget that has an increase. We will have to establish priorities within that program to best utilize the resources, both financial and manpower, to provide protection for the most critical endangered species.

We do believe, Mr. Chairman, that we can carry out the basic responsibility under the act with that amount of money.

Mr. LEITZELL. I would echo those comments, Mr. Chairman. I think we, too, have had to look at our priorities. As I indicated in my testimony, while our net increase is relatively small, we are going through a fairly large change in the kind of work that we intend to do. But we believe that we do have the resources. In particular, I would probably say that manpower resources, people, are probably more important than dollars resources right now, in particular, for dealing with section 7 consultation where we have a fairly large reserve base to call on but a relatively small number of people in terms of actual preparing and dealing with that kind of

activity. We do think we have enough. We are spread somewhat thin, but I believe we can carry out our responsibilities.

Senator CULVER. You mentioned the administration has requested for fiscal year 1981 and 1982, "such sums as may be necessary." The subcommittee and the full committee just don't operate that way.

Could you tell us more precisely at this stage how much money you are talking about for 1981 and 1982?

Mr. HERBST. Mr. Chairman, we have not completed our budget preparation for 1981 and 1982, but we do expect that in the endangered species program, as we complete the guidelines and the regulations, and as we finish the work necessary under some of the recovery plans, that we will be recommending a higher budget figure for 1981 and 1982 in this program.

I cannot give you a precise figure at this time. We have some preliminary estimates of the necessary financial and manpower needs. We could furnish them to the committee.

Mr. LEITZELL. We are in very much the same position. We would be happy to furnish the estimates but in some instances the regulatory actions to carry out the amendments are not complete and we cannot give you our estimates. But we can give you what is available.

It is difficult to determine an "optimum" level of resources needed in an area as dynamic as endangered species management. Whereas we are meeting our basic commitments under the law, we believe we could effectively utilize additional personnel and funds to those currently budgeted under the Endangered Species Act authorization. However, until the Federal Government reorganization is finalized, we are unable to identify specific dollars. When decisions are made, they will be based on current needs, obligations, and responsibilities as well as the President's guidance on conservative Federal spending.

Senator CULVER. Our problem is the May 15 deadline. So, if you want us to consider giving you any more money, you better get your requests in.

GAO recommends, apparently, in their draft report that the definition of species be amended to exclude distinct populations of vertebrate animals. How many animals currently proposed for listing would be excluded under this reverse definition?

Mr. HERBST. I am going to refer that to Hal O'Connor, our associate director.

Senator CULVER. Do you have any specific examples, Mr. O'Connor?

Mr. O'CONNOR. I don't have any specific examples, but it would be a very few numbers that would be excluded.

Senator CULVER. Can you provide as much detailed information as you can for the record on this?

Mr. O'CONNOR. Yes, sir, we can.

[The information requested follows:]

The proposed listing of the Beaver Dam Slope population of the Desert tortoise in Utah would be affected by this redefinition of species.

Senator CULVER. Do you agree with the amendment?

Mr. O'CONNOR. No, sir, we do not agree with the amendment. The ability to list populations is very necessary to us so that we do not have to list species that are not endangered or not threatened.

For example, we have not listed the bald eagle in Alaska as we have in the lower 48 States. We have the alligator listed as unlisted, threatened and endangered in different parishes of Louisiana and different parts of the country, because that is what the biological status warrants.

If we had to change the definition, we would be limited in our ability to do some of these things. In other words, we would not be able to list populations of vertebrates.

Senator CULVER. I would like as complete a position as you can have for the record on this, as much detailed information as you can develop on the implications and consequences of this proposal on the overall administration of the program.

Mr. Herbst, that draft GAO report raises a serious question as to whether the funds appropriated by Congress for the endangered species program are being utilized effectively. For instance, the report charges that because established endangered species land acquisition policies were not followed in several instances, approximately \$31 million appropriated by Congress was used to acquire habitat for species facing a low degree of threat.

The draft further states that in fiscal year 1978, the service used largely undocumented data concerning the number of consultations conducted to justify a requested \$2.8 million increase in fiscal appropriations.

On the other hand, the report states that insufficient resources were allocated to the listing of species.

Now, I wonder how you might respond to these charges. As I indicated in my opening statement, I think that much of the information that has come out in this draft report was available to us when we considered the 1978 amendments. In fact, many of the points in the GAO report were addressed in the amendments.

But, it seems to me that it is appropriate for us to consider these allegations about inappropriate use of the funds that Congress has made available to you since that will necessarily impact our consideration of reauthorization legislation.

Before you respond, however, I would like to emphasize very strongly to the GAO people here that I am personally very disappointed that we have got ourselves in a situation which I think is fundamentally violative of due process, as well as the appropriate procedures of the agency.

I have enormous respect for the potential contribution in the efficient and appropriate operation of our government that GAO can represent. But I don't think it can carry out that mission well if in fact the ordinary processes for the publication of their findings are short-circuited. To the extent to which appropriate procedures are not observed I think the integrity of those findings is very substantially and seriously undermined. I understand that politics is not new to this town, and it is not new to your agency. But, I think it is highly inappropriate to have an agency here in a public forum trying to cope with allegations, charges, rumors, counter-charges, draft allegations and so on and so forth before they have been afforded every opportunity to respond to and rebut those

charges. It may be that their response will alter your final judgments. At least they should be considered if the process means anything. So with that caveat, with that admonition, and without trying to prejudice anybody's findings, let's proceed. I do think you are obligated to respond now and necessarily so, because the GAO report has been made public.

And what do you have to say on it, Mr. Herbst?

Mr. HERBST. Let me make a few general comments and then I will let Director Greenwalt highlight the specific allegations briefly on resources not used effectively and the other point you made.

Overall, as I said in my testimony, regarding these allegations, I believe there are numerous errors. I believe that many of the allegations are unsubstantiated and there are misunderstandings. We have prepared a one-page response on each of these.

I will have to the committee, within 1 week, a very detailed, documented response to each of the allegations. And it is my hope and my expectation that with that documented factual response to GAO, that the report will be substantially altered and that many of the allegations, in fact, are not valid criticisms.

With that, Mr. Chairman, I will call on Director Greenwalt to respond briefly to the allegations, and we will submit to the committee today a more detailed response, understanding that a far more detailed and factual response will be to you within 1 week.

Senator CULVER. When are you giving your formal response? What is the normal procedural time for you to respond to GAO? How substantial a breakdown have we had in communication and coordination?

Mr. HERBST. That is my concern, too, Mr. Chairman. The report is a draft proposed report. And I actually saw some of the allegations—

Senator CULVER. Why do you even have a draft proposed report before you even talk to the agency you are investigating or get their rebuttals, I mean?

Mr. HERBST. That is a good question.

Senator CULVER. When did you hear of the report?

Mr. HERBST. I saw it in the newspaper before I actually saw a copy of the report. We have completed our draft response and it is to the Secretary's office for review now and it will be transmitted by our Office of Program and Budget Management, on the 11th of this month. At the same time we send our response to GAO, we will also send a copy of that response to the Hill.

Senator CULVER. We aren't the administration, you know. We don't need to have all this dirty linen sent up to us. It ought to be washed downtown at least once. We have enough to do. Somebody else ought to do some of it.

Mr. GREENWALT. In the ordinary course of events, in my experience with GAO—and I have been involved with these folks at various times for almost 20 years—the procedure, and I understand the procedure that can be followed in the current situation is one in which we meet with the authors of this draft report and express our concerns, and find some meeting of the minds about the content of this report. This has always been the practice in my experience before and I am convinced that this can be done in the present circumstances. What went awry, I am not at all sure,

except that the process of the agency and GAO discussing the obvious differences just was not carried out. And I feel quite confident that in discussions with the GAO folks, we can arrive at something other than the present draft report.

I would like briefly to respond to some of the statements made in the GAO report and to which you have referred, Mr. Chairman. First of all, the implication that we have improperly allocated our resources in connection with that very critical aspect of listing species. We have presently available in the Fish and Wildlife Service something on the order of 355 people who are involved in the endangered species program, 12 of whom are specifically concerned with the listing process.

As I am sure everyone appreciates, listing is not the only thing that goes on in endangered species work, and that work also includes very important aspects of permit issues and law enforcement and managing land for endangered species and doing all the other things that are implied in an effective endangered species program. As the officer principally responsible, I find it inappropriate to assume that we should apply all our effort to the listing process when in fact there has to be some kind of balance struck absent an infinite number of dollars and people available to cover all bases.

I cannot, therefore, agree that we have not used our resources effectively. I am willing to accept the idea that there may be more effective ways to do it. However, I submit that in the present circumstances we have not ineffectively used our resources.

As relates to the question of our suggesting to this body and to the other House that the number of consultation needs were far greater than was actually the case, I can say without equivocation that, first of all, we never expressed the number of consultations as being anything but an estimate. We have also pretty well confirmed on the basis of recent statistics accumulated by our regional offices and others who are in one way or another involved in consultation, that in fact our relations with Federal agencies whose activities may have an impact on listed species are indeed extremely numerous. And in fact our original estimates may have been conservative. I am sure it is evident to the chairman of this and other committees that in the sense of coming forward with an inflated or unsupportable estimate about the numbers of consultations that might be undertaken in order to generate support for funding—that is just not something we would do.

There is an increasing number of contacts with Federal agencies, and there was even, under the unamended or 1973 version of the act that may have ranged from a simple telephone call to a very formal and extended consultation. I believe we can persuade the GAO examiners that our estimates, while they were just that, were estimates, are basically supportable.

Mr. Chairman, one other question that I think warrants discussion relates to the allocation of section 7 funds and manpower. GAO constructed its report and the graphs and charts and the verbage involved in it based on the idea that all the money that has gone to the regions has been used for section 7. Not true. Our allocations to the regional offices include funds that are meant for purposes other than section 7. And I think the GAO report failed

to recognize that statistical fact, another one of the things I believe we can straighten out through discussion between the two offices.

I think perhaps the most difficult confrontation that we have to discuss between us is the acquisition of land and the use of appropriate criteria in the acquisition of land for endangered species purposes. We have, as a service, adopted the policy generally in the acquisition of land, whether it be for endangered species or migratory birds, or any purpose, that we will in fact use acquisition only as a last resort. The question of what constitutes a last resort, a no-alternative option, of course, is one about which there is disagreement between this service and the GAO. Their perception that we violate our own criteria and our own standards for making decisions about acquiring land, will be the subject of considerable debate and discussion. And I can say that I am willing to stand by the principles and approaches this service has used, because I think they are right and correct.

Senator CULVER. Are you vulnerable to a charge you have been using a disproportionate amount of money to acquire habitat for species which in fact are facing a low degree of threat?

Mr. GREENWALT. I think we are not, sir.

I am unaware of the specifics of that kind of charge. And unfortunately I have been unable, from my own reading of the report, to assess precisely which species we have been deficient on. I am unable to tell from reading the report which species have been affected in that fashion. So I am not prepared to say whether in one case or another we are vulnerable.

I am quite certain that if the GAO people are able to document those concerns that I would be equally prepared to respond to those upon presentation of documentation, sir.

Senator CULVER. Mr. Leitzell, did the GAO contact the Marine Fisheries Service as it gathered information for its draft report?

Mr. LEITZELL. No, sir, to the best of my knowledge, it did not.

Senator CULVER. How can we view the report as being complete without inclusion of the marine mammals?

Mr. LEITZELL. I would feel it is not complete if it did not also address our program, and it does not at this point.

Senator CULVER. Senator Chafee?

Senator CHAFEE. Changing the subject a bit, in your presentation, you said, in connection with your zero-based budgeting, you are eliminating some \$200,000 that went to the States. I am not opposed to that; I am just curious as to whether bringing the States to an abrupt halt like that is damaging in some constructive contribution they might be making to the program.

Could you comment on that?

Mr. LEITZELL. We simply felt, Senator, in going through our program priorities, that the money which we were giving to States was not as high a priority as many of the other programs that we had in this particular area. I must admit that I personally did not know the State programs that were being funded in detail. We could provide more information on that, if you like.

Senator CHAFEE. I must say the amount wasn't all that significant, \$200,000, spread over whatever.

On what basis was it distributed? What was your formula?

Mr. LEITZELL. It is not a formula program. It is a specific project program.

Senator CHAFEE. It is just a grant, 100 percent?

Mr. LEITZELL. Yes.

Senator CHAFEE. I am wrong. It is \$300,000. And you are not sure how many States—well, it wasn't a question of States taking advantage of it; it was just an outright grant, right?

Mr. LEITZELL. Yes. Actually, it is a program that in essence never really got off the ground, at least for us. I can't comment for Fish and Wildlife Service. We had done very little in this area.

Senator CHAFEE. Mr. Herbst, on page 7 you say that in March, just a couple of weeks ago, 3 weeks ago, you formally withdrew all pending proposals to designate critical habitat in order to carry out the procedural requirements mandated by the 1978 act.

Mr. HERBST. That means that it has to be accompanied by an economic analysis so they have to be withdrawn and that economic analysis has to accompany the critical habitat proposal.

Senator CHAFEE. I see. Now, are you gearing up to get back into this, starting with your economic analysis?

Mr. HERBST. Yes, Senator, we are. As you note on the bottom of that page or the next page, I indicate that by April 6 we are to have to the Secretary a proposed set of alternatives on which to proceed. And so we are proceeding, and we are hopeful that at least 20 of those critical habitat designations will be complete with the economic analysis this next fiscal year.

Senator CHAFEE. Now, Mr. Leitzell gave us sort of an overall review on how things are coming. Really, that is what I am most interested in. If we are doing some good, fine. If we are not meeting the problem, then obviously more has to be done. As I understand, you seem to be fairly optimistic that things were improving. You cite some failures, the California condor and a couple of other species that I must confess—

Mr. HERBST. Correction for the record. That was my testimony.

Senator CHAFEE. It is your condor.

Mr. HERBST. I added the wolves in between, too.

Senator CHAFEE. Now, could you just tell us briefly why aren't we doing so well there, and can we do more? It seems to me the reason we are having these hearings is just not to quibble over a dollar here or a dollar there; it is how the program is doing.

If there is no need for the program, then we don't give you so much money. If there is a need for the program, or you are failing, we should step up our efforts. What about those species you think you are not doing so well in?

Mr. HERBST. Senator, we have proceeded with success on a number of species. We have managed to stabilize some; and some, in spite of the best efforts of the Service—and those efforts may have been limited—have declined.

In the case of some of those declining species, additional recovery efforts are underway. I mentioned in my testimony we have now appointed some 75 recovery teams. We are proceeding with at least 60 recovery programs. In the case of the California condor, we have completely reviewed the recovery plan. We have met with the Audubon Society and other organizations that are interested in the recovery of the condor, and we are proceeding now with the recom-

mentation of a new program to hopefully put that species on the road to recovery, even though it will be difficult and very costly.

Senator CHAFEE. I am going to ask this same question of the Wildlife people that come up here. Do you think your programs are working with the maximum cooperative effort with the private groups that obviously contribute significant amounts of money? Is there redtape that is causing unnecessary problems here?

Should we change our laws? How are we doing in that way?

Mr. HERBST. Senator, I will call on Mr. Greenwalt, who deals more directly with the outside organizations, to comment on that. But my feeling is that overall the cooperation has improved. We, in the last several years, have had more of an open process. We have jointly met with a number of these organizations. They have been involved in some of our recovery efforts. They have been involved in some of our recommendations. And, as you well know, there is a diversity of opinion in the conservation community ranging from those that feel we are listing species too fast to those that feel we are doing more delisting than we are listing, so we are never going to have everybody in agreement.

But we do meet with all sides and all segments of that diversity in an effort to do the best job possible, which is for the species itself and ultimately for the quality of life in this country.

Senator CHAFEE. I am not so much interested in the squabbles that inevitably will come up between whether you are delisting too quickly. When you concentrate on an obviously endangered species like the California condor, just based on your statistics here, which I find alarming, then is the effort that results from the Federal Government working with the wildlife organizations—does it go along in the maximum efficient way, or are you hamstrung by the traditional term of bureaucratic redtape? I am going to ask them the same question. They will come at it from a slightly different approach.

Mr. HERBST. I would hope you would, because in that case specifically we did meet. The conservation community and ourselves jointly worked on the plan. The recommendations for bringing the condor back included joint effort of both the Federal Government and the State, as well as the private sector, with the private sector being willing to put up some of the money itself. I believe that the one organization that has been involved in that effort, the Audubon Society, will so testify to that fact.

Mr. GREENWALT. I think Mr. Herbst is absolutely correct. I perceive no legal impediment to a joint funding or effort of this kind. The private wildlife organizations are particularly valuable, in my judgment, in their ability to relate effectively and to provide funding to foreign countries. The Endangered Species Act, as you know, is one that extends its influence and that of the United States worldwide, which is important if we are, in fact, to achieve the kind of things the act intends.

Many of the organizations, several of which are scheduled to appear here today, provide funding in those places where funds are most acutely needed and where the problem is greatest, particularly in foreign countries.

In those circumstances where we have had an opportunity to work together, as for example with the condor program, we have

encountered no legal impediment to conjoining Federal and private dollars, or Federal and State and private dollars.

I am unaware of marriage problems in the sense of a traditional antipathy or development of redtape between the Federal agency and the private organization. There may be differences of opinion as to how the money ought to be used.

These, of course, are inevitable sooner or later and have always been worked out. The endangered species program is one that has authority of comforting dimensions. We are able to do whatever is necessary to carry out the intent of the act. And for that reason, we are able to make money available to universities, to private science groups, and in general to enlarge the Federal Government's capacity.

I might say, as one observation, Mr. Chafee, in reaction to your earlier question about how we are doing, we collectively are doing fairly well in the United States. We are not doing very well in the rest of the world. You will hear this I am sure, from the other panel, made up of members whose judgment I respect tremendously because I have known them for some time. The problems that are accruing to species both of plants and animals elsewhere in the world defies description. I am ordinarily an optimistic person, however. I am not very optimistic about wildlife and their habitat elsewhere in the world. The United States just returned from a second meeting of the parties on the Convention on Trade in Endangered Flora and Fauna. There were about 30 nations involved. That group earnestly and diligently worked to strengthen the international ties that have to do with the impact on endangered plants and animals by virtue of international trade in those commodities.

Great strides were made in that connection, but it, during the course of that 2 weeks, revealed again that there are tremendous pressures on these resources, some of which are native to the United States, or even North America, most of which are native to other parts of the world, and which are exploited, unhappily, by large measure, by virtue of the influence of the United States.

Senator CHAFEE. What do you mean by that?

Mr. GREENWALT. By that I mean the fur trade, and the unwarranted pet trade. And I qualify those terms very carefully, because there are legal uses of these—

Senator CHAFEE. If you feel this way, and if your Department feels this way, why don't you come forward with some suggestions to us?

Mr. GREENWALT. Well, one of the things we have done, Mr. Chairman, and Senator Chafee—and Mr. Herbst alluded to this; without going into great detail, he pointed out that we have effectively controlled a large part, but by no means all of the illegal traffic of endangered fish and wildlife that comes into the United States. We do not get it all by any stretch of the imagination. We do very carefully control that which is legal, and that is very important. There is a great deal of money to be made in the traffic in these creatures. And many illegal activities involve a great deal of money, and we have recently, for example, stopped the trade across from Mexico to the United States in furs by catching an individual in possession of more than 1.2 million dollars' worth of

furs and hides illegally removed from the Republic of Mexico into the United States for the purpose of transshipping them to Europe. This individual is in deep trouble.

Senator CHAFEE. I hope he is.

Mr. GREENWALT. He is but one of several that we have in this fashion.

Senator CHAFEE. What I am suggesting to you is that if there are gaps in the law, or there are areas that are going unchecked, that you think should be checked through some action that we can take, then the only way we are going to find out is if you tell us.

Mr. GREENWALT. Absolutely, sir, and I am suggesting that the Endangered Species Act as presently written provide the checks and the balances necessary in the United States. Part of the problem, as you will be informed generally, is the inability of foreign nations to do as well. And therein lies some of the problems that affect even this country.

Senator CHAFEE. I appreciate that. But I think we despair over what foreign nations are perhaps doing, but I think it is up to us to do the very best we can. That is why we look to you for recommendations in this area.

Mr. LEITZELL. I wonder if I could add a brief comment. I would agree I see gaps in the law, and I think one of the things we have tried to do, as well as the Fish and Wildlife Service, is to use the cooperation that we do get from environmental and conservation groups in helping us to be more effective.

One example I would give, I talked earlier about the potential problems with sea turtles and shrimp fishing. When we were in the process last year, almost a year ago, of putting together a research plan on the sea turtles to deal with the problem, a combined group from the shrimp industry and the environmental community came to see us, essentially to urge us to accelerate our program. We sat down, as essentially a troika and decided what to do; and we did make major changes in the program. The efforts they have made to cooperate with each other and us, I think, turned out to produce a considerably better program.

In the same respect, they also provided us with a great deal of information which is used in discussions that we undertake with foreign countries in attempts to better protect both marine mammals and other endangered marine species, and they provide us with information, frankly, which is used in enforcement actions. I am encouraged that that kind of cooperation is taking place. I think the law permits that, and I think that is the important aspect. I think we can continue to do that and have a considerably better program because of it.

Senator CULVER. I wonder if Mr. Greenwalt and Mr. Leitzell could remain and Mr. Herbst, you could be excused.

Senator CHAFEE. Let me ask you quickly about the importation of ivory. Is that having a deleterious effect on elephant populations in the world? And if so, what are we doing about it?

Mr. GREENWALT. It can have, because ivory is a valuable commodity. The United States is not only a consumer but a processor of ivory. The ivory from the Asian elephant cannot be brought into the United States legally. It is not possible to tell the difference

between the ivory from the Asian elephant and African elephant simply by looking at it.

So neither can be brought in legally without proper documentation to the effect that the African ivory is of legal origin. We do not at present feel that the trade that is permitted in African ivory is necessarily deleterious to the future of African elephants, though their habitat is being affected mightily by civilization changes in Africa.

We are prepared and have been prepared to change the regulation as it relates to African elephants if it is demonstrable. I am asking staff now to look at this, if it is demonstrable that the trade in ivory, particularly that which is illegally handled, has increased substantially.

There are two major areas in the Orient where ivory is taken, and where it is partially processed and in some cases finely carved and exported. And the United Kingdom in behalf of Singapore, has long since agreed that it will keep that ivory trade as legal as it can. And if it fails to do so, we have indicated that as far as the United States is concerned, we will curtail ivory imports.

One of the problems that I perceive is that if there is by some means the total control over the taking of ivory in Africa, the elephant may become, rather than an animal of intrinsic value, a problem. Because in its natural habitat in Africa, it becomes a problem to people because of their farmland.

The habitat for the elephant is diminishing, crowding the elephant and destruction takes place. And frequently when an animal becomes a pest, the local populace will take the rather obvious action and get rid of the pest.

Senator CHAFEE. You have a balancing there between getting rid of a pest or whether they are getting an economic benefit?

Mr. GREENWALT. That is right. And it is extremely difficult to assess which is the dominant consideration at any given time. And needless to say, there are great pressures, and legitimate ones, on the Secretary and on the Fish and Wildlife Service to control absolutely the trade in ivory to inhibit poaching.

At the same time, if there is no legitimate market for ivory, the animal may diminish to the degree it becomes a pest and it becomes a serious problem.

Senator CULVER. We will have some additional written questions for Mr. Herbst which we would hope would be responded to promptly, Mr. Greenwalt.

Mr. GREENWALT. We will see that they are.

Senator CULVER. I would like to call on Dr. Lester Silverman, Director of Policy Analysis in the Department of the Interior, who has been working very closely with the administration in the implementation of the newly established Endangered Species Committee.

We look forward to your testimony, Mr. Silverman, and perhaps you might also take the occasion to respond more specifically to some of the questions that have been raised about those procedures.

You may begin.

STATEMENT OF LESTER P. SILVERMAN

Mr. SILVERMAN. Thank you, Mr. Chairman.

Before starting my remarks or a summary of my remarks, I would like to introduce, to my left, Dr. Robert Davis of the Office of Policy Analysis, who was the primary staff person in preparation of the report on the Tellico Dam and Reservoir project; and to his left, Mr. John Trezise of the Solicitor General's Office in the Department of the Interior.

Mr. Chairman, members of the subcommittee, I am pleased to appear before the Subcommittee on Resource Protection on behalf of Secretary Andrus in his capacity as Chairman of the Endangered Species Committee.

As you know, prior to passage of the Endangered Species Act amendments, the position of this administration was that the exemption process was not necessary. The Secretary continues to feel that the consultation process is the primary vehicle through which conflicts between Federal agency actions and endangered species protection are to be resolved. However, the committee has proved to be a workable and useful tool; Congress has given us a job to do and we have demonstrated it can be done.

In the next few minutes, I would like to summarize the experience of the Endangered Species Committee to date, and then respond to some of the questions that have already been raised, and any additional questions.

The Endangered Species Act amendments set very short deadlines for the accomplishment of two tasks. First, it required promulgation of regulations on the filing of exemption applications. These proposed regulations were published jointly by the Departments of the Interior and Commerce on February 7, 1979. Second, the amendments directed the committee to consider whether or not to grant exemptions for the Tellico Dam and Reservoir in Tennessee, and the Grayrocks Dam and Reservoir in Wyoming.

As required by the amendments, the Grayrocks and Tellico cases were considered on an expedited schedule. Through correspondence between the Secretary, as Chairman, and the other members, and through staff-level meetings, we developed a procedure which allowed the Committee to make its decisions in a reasoned and informed manner and within the deadlines established by the law.

The Committee held public hearings on January 8, 1979, both in Washington and near the project locations, to receive public comments on the Tellico and Grayrocks projects.

Senator CULVER. On the occasion of those public hearings, did you have representation from each of the offices, membership of the board?

Mr. SILVERMAN. Representation by—

Senator CULVER. Who held those public hearings? Who was in attendance for the entertainment of testimony?

Mr. SILVERMAN. The hearings were carried out by administrative law judges designated by the Secretary as chairman.

Senator CULVER. There was no other representation from the membership of the board?

Mr. SILVERMAN. No, Mr. Chairman, there was not.

Senator CHAFEE. There could have been, I presume, couldn't there?

Mr. SILVERMAN. There could have been, yes.

Written public comments were also sought regarding the criteria the Committee was required to use in reaching its decisions. On the basis of the assembled public record, staff reports were prepared that summarized the evidence submitted and analyzed the options available to the Committee.

These reports did not contain recommendations. The reports were provided in draft to Committee members and their staffs and were discussed in staff-level meetings on January 17. The reports were turned around in 48 hours and finalized on January 19.

On January 23, 1979, the Committee met to consider exemptions for these projects. All members were present at this meeting, which was open to the public as required by the amendments. The Committee voted unanimously to grant an exemption from the requirements of the Endangered Species Act for the Grayrocks Dam and Reservoir, but imposed certain mitigation and enhancement measures.

It also voted unanimously to deny an exemption for the Tellico Dam because it found that the benefits of completing the dam did not clearly outweigh the benefits of a river development alternative that would not cause extinction of the Snail Darter. The Committee's actions were reflected in written decisions issued on February 7, 1979.

Senator CHAFEE. On the Tellico decision, the Governor of Tennessee was a member of the Commission, wasn't he?

Mr. SILVERMAN. No, Senator Chafee. The State of Tennessee was represented by Mr. William Willis, an attorney from Nashville.

Senator CHAFEE. And the decision was unanimous?

Mr. SILVERMAN. That is correct, sir.

Senator CULVER. But that was the Governor's representative?

Senator CHAFEE. The State member of the Committee is appointed by the President based on a recommendation from the Governor. Mr. Willis was among a list of nominees sent by Governor Blanton. Those nominees were passed on by the Secretary to the President. The President made the appointment.

You might come back to the matter of the dates, if you wish, that Congressman Duncan raised.

Senator CULVER. You may wish to. It is up to you. It would seem to me you would wish to.

Mr. SILVERMAN. Perhaps I will go on and then come back to that point, sir.

Since passage of the amendments, only one application for an exemption has been filed. On January 26, 1979, the Pittston Co. applied for an exemption for its proposed oil refinery and marine terminal in Eastport, Maine. A biological opinion issued by the Fish and Wildlife Service in December 1978 found that the refinery and terminal posed jeopardy to the eastern bald eagle. The processing of this application was stopped, at the mutual agreement of Pittston and the Secretary of the Interior on March 6, 1979, after the Fish and Wildlife Service and the Environmental Protection Agency, from which Pittston must obtain a water discharge permit, reinitiated consultation on the effects the project might have on the bald eagle.

If the further consultation fails to resolve this issue, the review board which has been empaneled will continue its consideration of the Pittston exemption application when consultation is terminated. I might also note that the same project could potentially involve the Committee in a decision concerning several species of endangered whales. The National Marine Fisheries Service and EPA have been in consultation on the effects of the project on these species.

Looking to the future, we have drafted proposed regulations covering review board procedures and Committee procedures which will be circulated to the permanent members of the Committee for their review and concurrence; we anticipate they will be published in draft for public comment within a month.

You have asked for the Secretary's views on technical or clarifying amendments which might be necessary to facilitate the Committee's operation. Because the Committee has had only one meeting, which was convened on a highly expedited basis, and because one review board has just been empaneled and it has not yet met, we have not had any practical experience with the full process established by law. Thus far, we have not encountered any substantial problems that would require amendments, and we do not have any to propose at this time.

The Secretary firmly believes that the Endangered Species Committee should serve only as a court of last resort. There should be an ample opportunity to develop data in an effort to reach accommodation without doing violence either to an endangered species or an otherwise worthwhile project.

The exemption process should be used only in cases where attempts to resolve a particular conflict have failed. That is the view President Carter expressed when he signed the Endangered Species Act Amendments of 1978, and the Secretary wholeheartedly agrees.

With this principle in mind, we have found the Committee process workable and appropriate for the resolution of those cases where an irreconcilable conflict exists between preservation of endangered species and achievement of other public goals.

I would be pleased to answer any questions.

I perhaps will take this opportunity to simply clarify the chronology of the appointment of Mr. Willis since the matter was raised by Congressman Duncan.

On December 4—which was within the 30-day period during which the Committee was to initiate consideration of the Grayrocks and Tellico cases, the Secretary, as Chairman, sent a letter to the Governor inviting his suggestions as to who might be appointed to the Endangered Species Committee representing the State of Tennessee.

The letter from Governor Blanton to the Secretary was received on December 1, and the Secretary transmitted the nominees of Governor Blanton to the President on December 13. The President's appointment of Mr. Willis did not take place until January 11.

Senator CULVER. What was the last point?

Mr. SILVERMAN. The appointment of Mr. Willis took place by the President on January 11. I might remind the subcommittee that this was an extremely busy time for the President. It was over the

holidays. He had some health problems. He spent the holidays in Plains, and in addition, during part of that time, was involved in a summit in the Caribbean. Therefore, the actual appointment was not made until January 11.

We were immediately in touch, of course, with Mr. Willis. And with regard to the Grayrocks case with Governor Herschler and Mr. Snyder, a representative of the State of Nebraska, we gave them every opportunity to be informed about all work that the committee and staff had taken up to that point.

I can report that all three individuals were quite comfortable with the process the committee and its staff had followed to that point. And each had had the opportunity to be completely briefed to their satisfaction prior to the meeting on January 23.

Mr. Chairman, I would be pleased to respond to any other questions.

Senator CULVER. What was the date of your hearing in Tennessee?

Mr. SILVERMAN. January 8.

Senator CULVER. Who made the determination on witnesses?

Mr. SILVERMAN. At the public hearing in Tennessee?

Senator CULVER. Yes.

Mr. SILVERMAN. There was a notice in the Federal Register, and anyone who wished to appear at that public hearing could do so. We had an administrative law judge present who received all written and oral testimony that all witnesses who desired could deliver at that point.

I might point out, Mr. Chairman, that in total on the Tellico project, 58 witnesses did appear on that day, the great majority of them in Tennessee, several here in Washington. And we received over 100—

Senator CULVER. How did the several here in Washington appear? You mean you made that part of the record? You mean they appeared before a different administrative law judge?

Mr. SILVERMAN. That is right. We had three different hearings going on simultaneously.

Senator CULVER. In different parts of Tennessee?

Mr. SILVERMAN. There was a hearing here in Washington that governed both Grayrocks and Tellico. There was a hearing in Knoxville concerning the Tellico project, and a hearing in Cheyenne, Wyo., concerning Grayrocks, all going on the same day.

Senator CULVER. Who designated the staff of the Endangered Species Committee during its review of the Tellico and Grayrocks Dam?

Mr. SILVERMAN. The Secretary, as chairman of the committee, designated that staff support to the Endangered Species Committee should come from his office, the Office of the Secretary. That assignment was made to the Assistant Secretary for Policy, Budget and Administration, to whom I report.

Senator CULVER. Did individuals from each agency represented on the committee participate or have the opportunity to participate?

Mr. SILVERMAN. Yes, Mr. Chairman. While not involving members from other agencies in the staff effort directly, we gave ample opportunity for the involvement of the staff of other committee

members. As I mentioned or alluded to in my testimony, I chaired three meetings involving the staff of all members of the committee. The initial meeting on December 20 discussed the process that the committee would follow and briefed the staff, many of whom were quite unfamiliar with the two projects in question.

Again, in early January, I chaired a meeting that finalized the procedures that the committee and its staff would follow in getting to the January 23 meeting. And finally, after the draft staff report was circulated, we had a long meeting in the Department of the Interior building, during which the draft staff reports were carefully and closely scrutinized by staff to all members of the committee.

Senator CULVER. Last year, as you mentioned, the administration opposed the creation of the Endangered Species Committee. After your experience with the Tellico and Grayrocks Dams, what is your view of the legislation pending before the subcommittee which would abolish the committee?

Mr. SILVERMAN. Mr. Chairman, as I also mentioned in my testimony, the President and the Secretary both feel that the committee is a last resort, an avenue for the resolution of conflicts which the consultation process has failed to resolve.

Senator CULVER. All you have to say is you are for it or against it.

Mr. SILVERMAN. I am for it.

Senator CULVER. For the legislation to abolish it or for the committee's continued existence?

Mr. SILVERMAN. For the committee to continue in existence, because it provides a mechanism—

Senator CULVER. You don't even have to tell me why.

Do you have recommendations concerning clarifying your technical amendments?

Mr. SILVERMAN. I do not at this time, Mr. Chairman.

Senator CULVER. Did the committee members have sufficient time to review the staff report prior to considering the exemptions?

Mr. SILVERMAN. I believe that they did, and essentially we were working very closely with the staff to the other members of the committee, and we did not hear at any point that they felt there was not time to adequately review both the staff report and the voluminous other public input that we provided to them.

Senator CULVER. So no committee member requested additional information or clarification of the draft report?

Mr. SILVERMAN. Well, there were questions regarding the staff report, and in particular, requests to see some of the backup material which was carefully referenced in the staff report but never concerned that there was something that was not clarified or could not be cleared up.

Senator CULVER. And all their concerns were resolved prior to their having to make a decision?

Mr. SILVERMAN. As far as we know, that was the case.

Senator CULVER. Now, the committee last year, as I recall, provided \$500,000—

Mr. SILVERMAN. I believe it was \$600,000.

Senator CULVER. I know it went back and forth. Then, as I recall, we also required a report from you within a year as to the adequacy or inadequacy of that funding level for your procedures. As you

say, you don't want to ever use it, you hope most of the problems will be resolved through the consultation emphasis of the act, which I think is what everyone hopes.

But do you have any indication now as to if you aren't going to work any harder than this, why do you need that much money?

Mr. SILVERMAN. Mr. Chairman, as you know, the workload of this committee and its staff is beyond its personal control. We have estimated that the budget provided to us on an annual basis would allow us to process up to four exemption applications at any one time. At this point, it is highly questionable whether we are going to have four exemption applications working at a particular time. But that is something we just cannot determine at this point.

If the number of applications exceeds that, then we may have to request an increase in the authorization. At this point, that is the level that—

Senator CULVER. What if you aren't going to be required to fight a four-front war every year?

Mr. SILVERMAN. Then we would be prepared to come and request a decrease.

Senator CULVER. Less?

Mr. SILVERMAN. Right.

Senator CULVER. So you are saving us money. You have it escrowed at the end of this year, if this is all the action you see, you have that nest egg for next year? Right? You are not going to come in and say, "Well, this two-front war we fought exhausted all our funds somehow, fell between the cracks, got lost 'administrative overhead,' quote unquote, chewed it up?"

Mr. SILVERMAN. The money will be carefully identified, Mr. Chairman, and all returned, which is not expended.

Senator CHAFEE. Senator Culver asked you if you had any amendments to recommend to the committee structure as we set it up to the amendments as of last year and you said, "No, not at this time." What did you mean "at this time"? Is the answer "No"?

Mr. SILVERMAN. The answer is "No," Senator.

Senator CHAFEE. Do you keep sort of a staff around to handle four conflicts that might come up or four exemption requests at once? How do you work your staff? You can't go up and down like an accordian. If there is no business, do you have anybody there? Or are they doing other things?

Mr. SILVERMAN. To this point, Senator, the resources of the Office of Policy Analysis, which is a standing office within the Office of the Secretary, have provided all staff support to the committee. So the answer is we have taken on this responsibility, and we have performed as need be on Tellico, Grayrocks, and on Pittston.

And when we are not working on these exemption applications, the staff are doing the things that they were hired to do.

Senator CHAFEE. Now, do I understand from the GAO report, or analysis, they indicate there is a potentially large amount of conflict that might come to you for consideration?

Mr. SILVERMAN. Senator, I have not studied the GAO report as it might potentially affect the Endangered Species Committee. At this point, we have identified several outstanding opinions finding jeopardy which could potentially come to the Endangered Species

Committee. But it would be highly speculative to try and predict what the workload of the committee would be over the next several years.

Senator CHAFEE. You don't see a mass backlog back there that might come plunging through at once?

Mr. SILVERMAN. I do not.

Senator CHAFEE. I must say I was amazed at how quickly you got the Tellico one done. You made a decision and got it over with—well, I am not saying you got it over with, you got by hurriedly.

Thank you, Mr. Chairman.

Senator CULVER. Thank you, Mr. Silverman. You may want to remain, if you would, please.

Our next witness is Mr. Henry Eschwege, Director of the Division of Community and Economic Development, General Accounting Office.

It is a pleasure to welcome you today, Mr. Eschwege, and your associates.

As I understand, you are the Director of the Division of Community and Economic Development.

STATEMENT OF HENRY ESCHWEGE

Mr. ESCHWEGE. That is correct, sir.

Senator CULVER. I have a question, I guess, upfront, and that is why this particular GAO investigation fell into your jurisdictional shop? Don't you have a Natural Resource Division at GAO or something like that?

Mr. ESCHWEGE. We have a special division called Energy and Minerals Division, which takes care of a lot of natural resources. But my division takes care of many of the programs; programs of the Department of Agriculture, Department of the Interior, EPA, NOAA, Commerce, Housing and Community Development—it takes in a lot of things.

Senator CULVER. That whole cluster of environmental issues, under your current organizational chart, falls into a Division of Community and Economic Development?

Mr. ESCHWEGE. Yes; it is very difficult to give the proper name to a division when you have such a large responsibility involving so many different departments, agencies, and programs. This is why, in addition to the divisional designation, we also have issue areas, and I have six of the major issues that we are addressing in the General Accounting Office, one of which is the environment; others are land use, water, et cetera.

Senator CULVER. Well, you may proceed.

Mr. ESCHWEGE. Thank you, Mr. Chairman.

I would like to introduce my colleagues. On my right is Roy Kirk, Assistant Director. On my left is Mr. Charles Cotton, who is supervising the particular review which we are talking about today.

Our comments are based on issues in our draft report which you already referred to and which we sent to the Secretary of the Interior on March 12, 1979, for review and written comment. I would like to mention that as we send these draft reports to the agencies, we put a red notice on the draft report saying that this is a draft of a proposed report of GAO; it was prepared by GAO staff

as the basis for obtaining advance review and comment by those having responsibilities concerning the subjects discussed in the draft and it has not been fully reviewed within GAO and is, therefore, subject to revision.

We caution the recipients of the draft that they must not show or release its contents for purposes other than official review or comments under any circumstances and that at all times it must be safeguarded to prevent publication or other improper disclosure of the information contained therein and that the draft remains the property of the General Accounting Office.

Now, in addition, we did send some copies to Members of the Congress that is, chairmen of committees—with the same cautionary language both in the letter that the Comptroller signed, as well as on the cover of the report. We are extremely perturbed by the fact the report leaked to a Tennessee newspaper, and we agree with the Department of the Interior that this is a very unfortunate situation.

It is not in our interest either to have our tentative findings and conclusions leaked to the press because it could bring about inaccuracies that we are trying to get out of these draft reports before they are finalized.

I cannot agree, however, with the Department of the Interior that there are major inaccuracies in this draft report, because we have had all along discussions with Interior officials with respect to our tentative findings and conclusions and have had exit conferences, which is our normal procedure.

But we are awaiting anxiously the Department's comments, and we will make such adjustments that are necessary to make sure that this becomes a balanced report when it gets up to the Congress and that it is fair and factual.

Senator CULVER. Is it normal operating procedures to send it to Members of the Congress in draft form? And what would be the appropriate rationale for that, that step of your procedures?

Mr. ESCHWEGE. We would only do that if we have been requested to do so by the committees that have a special interest, just like we would come up here and testify with respect to draft reports when the committees need the information and cannot wait until the final report is out.

Senator CULVER. But you only do it upon request and not routinely?

Mr. ESCHWEGE. We do not volunteer to do that. In fact, we are very reluctant to do that.

Senator CULVER. Second, you mentioned you had these ongoing discussions, so you are confident any characterization of your draft findings as being highly inaccurate or containing major inaccuracies would not be a valid observation or criticism. Did you consult during this period with NOAA officials?

Mr. ESCHWEGE. We specifically excluded the NOAA portion of the program from our report and so state in the scope section of the report.

Senator CULVER. How can you look at this problem comprehensively if you exclude one of the major elements in its administration?

Mr. ESCHWEGE. Well, we do our work in stages, and I would not exclude doing some work at NOAA at some future time. But in view of the urgent need and the major portion of the program being in Interior, we have in this case and on other occasions just looked at some of the procedural aspects. We do this as long as we specifically describe in the draft report what we have done and what we have not done.

We do think that based on the general interest during the last couple of years, the most urgent need was in the area in which there have been so many difficulties and this was the Interior portion of the program.

Senator CULVER. Well, I don't quite subscribe to that. I don't know how you determine that scope. You don't even know if there are major difficulties. What do you base that on? The gossip mill? This is hardly a basis to make an informed judgment.

If I sent some gumshoes into NOAA, who is to say they couldn't have greater horror stories than you kicked over here?

Mr. ESCHWEGE. As you know, the programs of the Government are huge, and unfortunately, our staff is small. And we are having problems with a different committee trying to——

Senator CHAFEE. If you had to do this over again, wouldn't you be more comfortable with a scope——

Mr. ESCHWEGE. I would be more comfortable in doing a lot more work, yes.

Senator CULVER. On this subject?

Mr. ESCHWEGE. Yes.

Senator CULVER. With a more balanced approach and looking at it in its totality if you are going to make a recommendation to Congress? We are asked to reauthorize not just this one aspect of the program but this other as well.

Mr. ESCHWEGE. We have, however, examined the legislation completely, and what we are here for today is really to recommend a couple of little technical changes in the legislation. And we think we have enough of a sample, looking at the Interior's activities, to make those kinds of recommendations.

Senator CULVER. You think that without even looking at it?

Mr. ESCHWEGE. We have looked at it extensively.

Senator CULVER. No, I mean NOAA.

Mr. ESCHWEGE. Yes. These are procedural changes in the law——

Senator CULVER. It is a lot easier to be confident about what you are ignorant about. It is like saying, "We haven't looked, but we are confident."

Why should Congress seriously entertain your recommendations in draft form?

Mr. ESCHWEGE. Well, we will have this report finalized in May, depending upon getting the Interior's comments at the time specified, which is the middle of April. We have provided as an attachment to this statement the kind of proposed language that we feel the Congress may want to consider.

We are willing to make this a part of the record as our official position.

Senator CULVER. I know, but aren't you a little troubled it may be premature?

You know, this time business is a problem. I remember last summer, we were talking about this. There were already at that time indications that there were problems with the program.

Now, you know we have to reauthorize this thing. You know the timetables we are under. And when I make this observation, I make it sympathetically to the integrity of your agency. GAO has a reputation of being sober in making judgments and conclusions that are only arrived at after the appropriate completion of a responsible process. And I just think for you to come in here with your specific recommendations, although we are glad to hear them and entertain them, procedurally this represents a short circuiting of something that is very basic and of critical importance if your agency is going to command respect, not only here on the Hill, but I think in terms of your interagency relationships.

I think the strength of GAO historically, to the extent to which it has enjoyed prestige, has been confidence that the necessary procedures have all been honored and satisfied.

It seems that, by your own admission, you haven't talked to the service yet, but you are already in a shooting match with allegations and counter-allegations. They say your report contains inaccuracies and you say it doesn't.

As someone who has to sit in some halfway responsible judgment in what comes before us, we like to look at somebody some place that has a certain disinterested objective, that has some real substantive foundation and is essentially unassailable as a result of the integrity of its process. And if you don't come before us in that fundamental posture, then it seems to me that GAO is just another special interest advocate.

Mr. ESCHWEGE. Mr. Chairman, I would have much preferred not to be here until the time that we had completed our final report. This was unfortunately not possible. I can promise you that we will keep you advised, as we have kept your staff advised throughout last year's considerations of legislation and this year's, if there are any changes that will occur as a result of these deliberations.

My mind and my staff's minds are not closed to any changes. We want to uphold our reputation for being honest and fair. We have offered to sit down with top Interior officials. And as I mentioned to you, throughout this review, we have talked to Interior. We have had this exit conference. We have had other conferences talking to them and getting their views. And we can only assure you that by May, we will have this report in final form.

But if anything changes in the meantime, we will be the first ones to alert your staff.

Senator CULVER. But you see the problems that even those changes are going to—

Mr. ESCHWEGE. I see the problem, but you can probably see my problem, too, that we cannot always have a final report ready whenever a hearing is being held. We were under the impression that this act that was passed last year had 18 months to run and maybe we miscalculated and thought we would have a little more time before these hearings would be held.

We were working toward, as it was mentioned in the committee report, helping this subcommittee trying to make whatever fine

adjustments and fine tuning would be necessary for the next reauthorization.

Senator CULVER. Why don't you proceed then.

Mr. ESCHWEGE. If it is all right with you, I will just highlight some of the things as long as the statement will be provided for the record.

Senator CULVER. Without objection, so ordered. [See p. 94.]

Mr. ESCHWEGE. I will skip over the management deficiencies. We only briefly identified them here because, as you point out, they are still in draft form. And I will proceed to the three recommendations of a legislative nature.

Our first recommendation would limit listings to species which are endangered or threatened throughout all or a significant portion of their existing ranges, that is, in areas where they are now living. We found that Interior's Fish and Wildlife Service is listing populations of species in limited geographical areas as endangered or threatened instead of listing the entire species.

This has occurred because the service has interpreted the definition of "species" to include populations, regardless of their size, location, or total numbers. Using the service's interpretation of the term, squirrels in a specific city park could be listed as endangered even though there is an abundance of squirrels in other parks in the same city and elsewhere. Such listings had increased the number of potential conflicts between endangered and threatened species and Federal, State, and private projects and programs.

For example, the Florida population of the Pine Barrens tree frog was listed as endangered in November 1977, when its overall status in the four States in which it exists was not known. The listing may conflict with land development and agriculture in western Florida.

The 1978 amendments to the act redefine the term "species" to exclude distinct populations of invertebrates, such as snails and insects. However, the new definition will not affect the listing of geographically distinct populations of vertebrates, such as the tree frog and desert tortoise.

Therefore, we are recommending that the Congress redefine the term "species" to exclude all distinct populations. This would limit listings to entire species rather than limited geographical populations.

Senator CHAFEE. That is quite a dramatic recommendation. Let me see if I understand what you are saying here. If in the entire United States there is a species existing in various places but in limited numbers, then if you come to a dam or a development of some type that is going to eliminate the species in this immediate area, you don't consider that. Is that what you are saying? Let's say the bald eagle in Maine is threatened by the Pittston Refinery. Now, you are saying forget that if there is a bald eagle existing somewhere in Minnesota. Is that what you are saying?

Mr. ESCHWEGE. No, we are not exactly saying that. We are saying that the species has to exist in sufficient numbers not to be endangered or threatened before it doesn't have to be listed. What we are really saying is that instead of listing it only for that specific area of the dam, you have to consider how many there are and what their range is and so forth, and possibly list them as, let's

say, threatened instead of endangered just for that specific area. And then the Secretary has a discretion still of making sure that the species in that particular area that you mentioned where the dam is will not be touched at all.

So we are not trying to say that we ought to not list it.

Mr. COTTON. Our position is that we are attempting to modify the term "species" to force the listings back to the definition of endangered species or threatened species. So the Fish and Wildlife would look at the overall species throughout its existing range and determine that, yes, it was threatened throughout its existing range. But the act as it was intended permits the Secretary to implement regulations which would provide greater protection in one area as opposed to another area for a threatened species. Therefore, even though the species was listed as threatened throughout its existing range, it could provide additional protection in limited geographical areas.

Senator CHAFEE. Are you talking about anywhere in the United States?

Mr. COTTON. It wouldn't be limited to the confines of the United States, because range would extend, like for the grizzly bear, through Canada and into Alaska.

Senator CULVER. Alaska is the United States.

Mr. COTTON. Yes. I am saying through Canada into Alaska.

Senator CHAFEE. I am saying you could have a situation where in Alaska, the American eagle might be thriving in a certain portion of Alaska. Therefore, under your theory, could you wipe out any American eagle habitats anywhere in the lower 48, as they say?

Mr. COTTON. The definition is that they are in danger of extinction or threatened with extinction throughout all or a significant portion of their ranges. So if the Secretary of the Interior looked at the lower 48 States and said the bald eagle is endangered or threatened in the lower 48 States, he would determine that is a significant portion of that species range and list the species as a threatened species.

Senator CHAFEE. Mr. Chairman, it seems to me we are getting into some very dramatic recommendations here, and I share your concerns that we are coming forward with a—I really don't see why these gentlemen are here today, to tell you the truth.

Senator CULVER. Who invited you?

Senator CHAFEE. Here we are coming forward with these recommendations which are very, very far-reaching, at least the first one is, on the basis of not receiving comments back from the Secretary of the Interior. His comments aren't even due until April 11. And to come forward like this really doesn't help us a great deal.

Now, we appreciate that you are probably here because you were asked to come or told to come. But it really doesn't do us much good. Here is the representative of the Secretary sitting over here shifting in his chair, either nervously or angrily, as your suggestions come up and he doesn't get a chance to rebut because the official comment hasn't come back.

Mr. ESCHWEGE. I think the representative from the Department of the Interior indicated he disagrees with this recommendation.

Senator CHAFEE. I suspect he does, but we don't get a chance to air his comments.

Senator CULVER. I think the problem that we face, Senator Chafee, is that for better or worse this draft report is in circulation. It is being given prominent consideration elsewhere on the Hill. I think if we are going to be holding hearings on reauthorization, we are placed in the awkward position of trying to at least afford a place for this information to be formally entertained or else we become subject to the criticism that we have not looked at the facts. I think we are caught.

I don't like this situation, because I don't think this is the appropriate forum for the resolution of these disagreements. You say that these are technical changes or managerial changes. But I think they have implications of a biological nature and these kinds of judgments shouldn't be made within your shop. At least they don't reside for their final resolution without far more formal exchange of views on them than we have noted here.

Mr. ESCHWEGE. We would certainly like to explain it more to the Department officials, because we think this particular recommendation in fact gives them more latitude and more flexibility to do just what Senator Chafee is concerned it should be maintaining; in other words, that the Secretary can still consider a species restricted in the 48 States although in Alaska you could continue to have more freedom with respect to these species.

Senator CULVER. Well, I think what we are going to have to do under these circumstances is just afford you an opportunity to present your recommendations with all the caveats and qualifications that you have acknowledged should accompany them. We should let this procedure work itself through and we will have ample opportunity in the hearing record to reflect the divergent views and your final conclusions.

But we are going to have to ask your cooperation in accelerating this information to us so we will have it available for our own markup on the reauthorization. For better or for worse, that is where we are and that is where you are and that is where we all are.

So you are just going to have to put the necessary resources on to get it done.

Mr. ESCHWEGE. I am committing myself to do just that. As you know, when our final report comes out, it will also have the Department's comments in it and it will show how we dealt with those comments.

Senator CULVER. We just have to leave this record open for specific responses to some of these suggestions.

Again, I don't think that is the best way to do it. We are caught prematurely as a referee while you lob these charges and counter-charges rather than sit down and do your jobs.

Mr. ESCHWEGE. I agree.

Senator CULVER. They already say we are getting paid too much doing the one we have without doing yours.

I can see superficially where your amendment to the definition of "species" would create a greater potential for conflicts, because even healthy populations, such as the bald eagles in Alaska, would have to be classified as endangered or else no protection at all could exist. And once you do that, obviously you complicate the whole enforcement side.

Why don't you go ahead and plow through this?

Mr. ESCHWEGE. Our second recommendation would amend section 7 of the act to make it clear that the Endangered Species Committee is authorized to grant a permanent exemption to any Federal project. The 1978 amendments to section 7 may not provide for the timely resolution of all conflicts because they may be read to exclude permanent exemptions for those Federal projects which had been committed to or were under construction at the time the 1978 amendments were enacted.

For these projects, the lengthy consultation process may have to be initiated and the project stopped each time an affected species is listed and a potential conflict is identified.

An example of a Federal project for which the 1978 amendments do not make clear whether a permanent exemption may be granted is the Columbia Dam project on the Duck River in Tennessee, which has been stopped because three species of mussels were listed as endangered and a jeopardy biological opinion was rendered. Construction, estimated to cost over \$142 million when completed, has been halted with the project about 55 percent complete and may not start again unless the conflict concerning the endangered species is resolved or an exemption is granted.

Even if project construction is resumed, other species in the dam area may be listed later. This in turn may trigger another project stoppage and further lengthy consultations.

The number of potential conflicts between Federal projects and programs and endangered and threatened species will increase in the years ahead as more species are listed and as their critical habitats are specified.

There will inevitably be conflicts involving projects committed to or under construction at the time the 1978 amendments were enacted. We are recommending that the act be amended to make it clear that the Endangered Species Committee is authorized to grant permanent exemptions to Federal projects committed to or under construction at the time the 1978 amendments were enacted.

Of course, the act would continue to require that the committee reconsider any permanent exemption which would result in the extinction of a species. Finally, neither the act nor our proposed amendment preclude the Congress from exempting a specific project or program after weighing its costs and potential benefits against the importance of conserving a species.

Our final legislative recommendation would require Federal agencies to adequately consider the impact their projects and programs will have on species for which notices of intent to review or proposed listing regulations have been published in the Federal Register.

The Endangered Species Act requires Federal agencies to consult with the service whenever an action may affect a listed species or its critical habitat and to conduct a biological assessment to identify any listed or proposed species which is likely to be affected by an action.

However, by limiting section 7 consultations to listed species and by not requiring that biological assessments include species for which notices of review have been published, the act permits Fed-

eral projects and programs to continue which may jeopardize the survival of species identified for listing by the Service.

For example, a Corps of Engineers project in the Sacramento River, Calif., continues to dispose of dredge spoils on the critical habitat of a proposed endangered beetle. A petition to list the species was accepted by the Service in April 1976, and a proposal to list the beetle as endangered and specify its critical habitat was published in the Federal Register in August 1978.

We are recommending that section 7 of the act be amended to allow permanent exemptions only after biological assessments have been conducted that include species for which notices of review or proposed listing regulations have been published in the Federal Register and that consultations also include these species.

Mr. Chairman, attached to my statement is a draft of proposed legislative language to implement our recommendations. This concludes my prepared statement. We shall be glad to respond to any questions.

Senator CULVER. I don't know how much we really want to go into this at this time.

I just want to emphasize you mentioned a few technical changes in the act, and right off the starting block, you spoke of amending the definition of species, which is one of the most far-reaching changes that I think could be made in the act. I don't know what your wish is, Senator Chafee. We have representatives here of the Fish and Wildlife Service and others who could speak to the merits of these particular proposals, and I gather they are in a position to offer rather significant rebuttals.

I don't know whether we want to take the time now to do that or whether we ought to let this be resolved in the ordinary course and procedures. It is my hope that you will talk with the Service and that this will influence your own judgments. I hope it will unless we have an agency with investigative authority and primacy in this area with closed minds on the subject.

Mr. ESCHWEGE. This is why the report isn't out yet. We are still waiting on the comments from the Agency. It might be presumptuous of me, but, Mr. Chairman, if you would try and let us discuss this with the agencies, they promised to have the final comments by April 11 and we would then apprise you of where they stand.

Senator CULVER. That would be my preference, if it is agreeable with you, Senator Chafee. I have a number of other questions. We will submit those to you for written replies, if I could. But I think it is fruitless to try to go ahead and have this negotiation and consultation procedure here. We are going to have to have another special committee set up to exempt all this if we keep this up.

So let me express my appreciation for your appearance here today and urge you to not waste any more time to get together and come back to something that you can genuinely have reason to be more confident about.

Mr. ESCHWEGE. Thank you, Senator.

Senator CULVER. Our next witnesses are Mr. John Borneman, National Audubon Society, and Dr. Thomas Lovejoy, World Wildlife Fund.

STATEMENT OF ELVIS J. STAHR, PAST PRESIDENT, AND JOHN BORNEMAN, NATIONAL AUDUBON SOCIETY, ACCOMPANIED BY THOMAS LOVEJOY, WORLD WILDLIFE FUND

Senator CULVER. It is a pleasure to welcome you here.

Dr. Stahr, I wonder if you would be good enough as past chairman of the National Audubon Society to introduce the representative from your association.

Mr. STAHR. Thank you very much, Mr. Chairman.

I am the immediate past president and now senior Counselor of the National Audubon Society. I appreciate the opportunity to introduce the next witness who has been a colleague of mine for the past 10½ years.

May I, before doing so, simply state quite clearly our conviction that the Endangered Species Act is a landmark and enlightened piece of fundamental legislation of which the Congress and our Nation as a whole can be very proud. And this committee, in developing last year the so-called Culver-Baker amendment to that act, deserves special applause and gratitude for, in our opinion, it saved the act itself.

I want to correct a misstatement that I am told appeared in the GAO draft report of which we have heard a good deal this morning. I have had a chance to read the draft, but I am told that the report states that it is the opinion of the National Audubon Society and the American Ornithologists' Union that the Fish and Wildlife Service's program for the California condor has contributed to that bird's decline. That is not our opinion, and I want you to know that.

The California condor, like the whooping crane, is one of the more spectacular species on the endangered list. A few decades ago, few people would have given the whooping crane any chance for survival. Today, as a result of joint efforts by the Fish and Wildlife Service, the National Audubon Society and others, it appears to be climbing steadily back from the brink of extinction.

We believe there is still a chance that this can be accomplished in the case of California condor and that we should seize that chance.

John Borneman is here from California to tell you more about that, and I am happy to present him to you.

Mr. BORNEMAN. Mr. Chairman, I consider it a very great privilege to be able to talk to you today about the needs of the California condor. I would also like to share with you some thoughts on why the California condor, among the myriad endangered species, should perhaps receive special attention at this time. The condor has suffered from what most of us in this room have suffered. Let me illustrate.

Increasing taxes force many ranchers in the range of the condor to sell out to second home developments. In Kern County alone, for example, over 100,000 acres of prime condor habitat is now under second home development. So, what has affected the rancher has also affected the condor.

In addition, vandalism has cost us, the taxpayers, countless millions of dollars over the years. Similarly, vandalism in the form of indiscriminate shooting has been a major contributor to condor mortality over the years. Also, the chemical pollution of our envi-

ronment has been costly to us financially as well as healthwise. This sort of pollution has caused eggshell thinning to California condors. It may also have contributed to the decline of the species in ways that are not yet known in detail.

Let me acquaint you briefly with the California condor and what I have observed over the past 14 years.

The California condor is in the family of birds known as New World Vultures, like most of us, they feed on dead animals rather than kill their own food.

Their spectacular 9-foot wingspan is the greatest of any land bird in North America, and their population is one of the smallest: perhaps no more than 30. Researchers in the early 1940's observed as many as 40 birds in the Hopper Canyon nesting area in Ventura County. In 1965, 18 birds was the largest number observed there, and over the past 2 years, four condors have been about the largest number of condors seen.

Nesting success for the entire population has averaged zero to two birds per year for the past decade. This is not enough to sustain the species.

Senator CHAFEE. How old do they live to be in their natural life?

Mr. BORNEMAN. It is hard to tell. In captivity, they have learned to live about 40 years. In the wild, I would say 30 years might be a reasonable lifespan.

Condors nest in rugged chaparral-covered canyons and lay a single egg in a cave, protected ledge or pothole in a sandstone cliff. They forage for food 30 to 50 miles from their nest sites. Their foraging trips take them over vast rolling grasslands spotted with magnificent oaks and pines.

Condor eggs are laid in February through May. The eggs are incubated for about 50 days. After hatching out, the young condor is in the nest site for 4 to 5 months. The parents share in the task of feeding the youngster. After leaving the nest, the young clumsy condor may take several months before it is a skillful flyer. It is totally to partially dependent upon the adults for food for another 8 or 9 months, gradually learning to forage for itself.

The preservation of endangered species often pictures a conflict between the needs of animals and the needs of man. But as we view the situation of the California condor, as indeed we may view the situation of other endangered species, it is becoming more evident that we are talking about a symbiotic relationship between man's needs and wildlife's needs. I grant you that this relationship sometimes seems quite nebulous, but this merely points up the fact that more research into this relationship is needed.

At a time when the American people are crying out against government spending, it is very legitimate to ask the question as to why funds should be spent to save 30-some large vultures from extinction.

I would like to use a personal experience to address that point. Several months ago, I was running by the Washington Monument along the Mall by the Reflecting Pool and the Lincoln Memorial at sunrise. I must say that it was an awesome experience and an emotional experience, especially since I hadn't been to Washington in many years. I began to think of a rationalization that could be used. Wouldn't we be able to save some money by, perhaps, elimi-

nating the maintenance of this area from the budget? Stop mowing the grass. Allow the Reflecting Pool to evaporate; this would certainly cut down on water consumption. Let the monuments deteriorate; this could also save some money.

There could also be substantial income generated from using this property differently. Condominiums could provide jobs if we built them in that wasted grassy area called the Mall, and the sale of the land for development could realize a lot of money. Well, I am sure if such actions were even suggested, the American people would certainly rise up and demand that whoever made those suggestions be put away. The reason people would be so upset, even though we are in a day where we are demanding fiscal responsibility, is that we are tampering with a very precious symbol. And symbols are very important. When all else seems to be crumbling around us, the symbols often sustain us. The symbols seem to be incorruptible. Therefore, when you take away a people's symbol, you take away the people's spirit. For symbols have a way of uniting people.

The condor has become a symbol to the people of California and to many thousands of other Americans. But, unlike our Washington Monument and our Lincoln Memorial, it can never be rebuilt if it is destroyed.

Californians are not too different from Texans in their desire to boast. And we do have some things to boast about. We have the largest tree in the world, the redwood; the oldest tree in the world, the bristlecone pine; the smallest bird in North America, the calliope hummingbird, and the bird with the largest wingspread of any land bird of North America, the California condor. Yet none of these things are our own creation. We, and you, are simply their stewards.

I receive letters from all over the United States and from various parts of the world from people who are concerned about the welfare of the condor, even though they will never have a chance to see one in the wild. I think it is because condors are symbolic of many things to many people. They are symbolic of the rugged chaparral-covered canyons where they nest. They are also symbolic of the open rolling grass and oak-covered hills where the birds search for food. They are symbolic of land use conflicts that have increased over the years. Finally, they are a symbol of the awesome responsibility we have to be wise and responsible stewards of our natural and human resources.

Popular articles have erroneously depicted the condor as the last remaining link to the Pleistocene age. It therefore has given the impression that the condor is merely a remnant species which should have become extinct a long time ago. I would like to correct this impression by pointing out that the California condor, as we know it today, has not been on the earth, to our knowledge, as long as man, or the common English sparrow that you find around the streets of Washington, D.C.

I think that as we look at the history of the condor, it is quite evident that the reasons for its decline have been caused by direct human intervention, and not the species' inherent inability to adapt. We now have our last chance to reverse its plunge toward extinction.

Mr. Chairman, I have watched the condor population drop by about one bird a year. Since coming on the job as condor naturalist for the National Audubon Society in 1965—some say that is a poor testimonial to my efficiency as a condor naturalist—I have seen a great many things accomplished as far as protective measures and habitat preservation. Yet the birds continue to decline. The time for drastic action is here. We hope it isn't too late. To implement the contingency portion of the California condor recovery plan is going to take money. The National Audubon Society has already committed itself to raising \$500,000 over the next 5 years. It is our hope that the Federal Government will add an additional \$706,000—it is actually \$731,000 due to an inadvertent omission—to help get the program set up and off the ground. Once the program is set up the annual cost will run in the neighborhood of \$170,000. At this point I would like to make a further correction on the General Accounting Office report. The report states that the total estimated cost of the plan to save the condor will be \$35 million. We estimate the cost at \$7.5 million over a 40 year period.

Once again I would like to thank you for the time you have taken to consider the needs of the California condor. I hope that I can count on your support for this much needed program.

I would also like to add that in my experience at the field level, I have never experienced anything other than complete cooperation and a free flow of information between myself and the Fish and Wildlife biologists and the Office of Endangered Species.

Thank you very much.

Senator CULVER. Thank you very much, Mr. Borneman. ♦

Dr. Thomas Lovejoy, World Wildlife Fund.

STATEMENT OF THOMAS E. LOVEJOY

Mr. LOVEJOY. Mr. Chairman, Senator Chafee, I am Thomas Lovejoy, Program Scientist at the World Wildlife Fund, which can be characterized as the major private international conservation agency.

I might point out that California is distinguished by having an extinct animal on its State flag.

Senator CHAFEE. What is that, the bear?

Mr. LOVEJOY. Yes, the California grizzly, the last one of which died in captivity on the Hearst estate.

Considerations of endangered species are often so preoccupied with species on an individual basis that the overall biological importance of such concerns tends to be forgotten. It is important to pause periodically to consider the importance of biological resources and why endangered ones are a cause for concern.

Much has been written about the new perennial species of corn discovered last year. Its potential for advancing culture of the third most important grain in the world, and lowering food prices, was of sufficient import to warrant a front-page story by the New York Times. What has been left out in most of the hubbub in the media is that until seen by a particularly expert botanist, this plant would have been considered hardly more than an insignificant weed growing in one of the last remaining and rapidly disappearing highland forests of the Mexican Sierras. This is probably an

endangered species and certainly one holding important potential for a perceptible advance of modern society.

One important point here is that many of the major advances in our history stem from the discovery of surprising new potential from species previously considered insignificant. Among the most fundamental were the discovery of agriculture which laid the basis for the neolithic revolution and related major advances of civilization, and the discoveries of antibiotics and vaccination. Some of the species involved were endangered; some were not. There is no reason to believe, as the discovery of this new species of corn dramatically tells us, that there cannot be many such surprises down the line, or that we can tell which species will provide them and which not.

A second important point is that while pressures of human population, of hunger, of poverty, and of development force us to destroy the planet's remaining wild ecosystems, many important contributions to meeting those pressures exist in those wild areas, waiting only to be discovered.

Potential advances in medicine, agriculture, and forestry depend squarely on maintenance of variety. Maintaining biological diversity is consequently a fundamental strategy in providing for future human welfare.

The above touches only on the direct benefits to be derived on a species by species basis, and says nothing about the more general benefits to be derived from protecting ecosystems and thus natural balances: Forest ecosystems that protect and regulate watersheds, for example, or fundamental global cycles of elements such as carbon or nitrogen. These are enormously significant values, ones which we have tended to undervalue because they have been perceived to be free, yet which we should all the more highly value because they are free. When a species becomes endangered, it does not only mean potential loss of direct benefits, perhaps yet unrevealed; it also means the ecosystem of which it is part is under stress, and that the ecosystem's ability to perform its more general functions is being eroded.

Chairman Culver has already alluded to some of the practical considerations of protecting species on a population-by-population basis.

There has been some discussion as to whether protecting the species is enough and whether past preoccupation with protecting each population of a species isn't really carrying things too far. There is a practical advantage to the population-by-population approach in that one can concentrate protection where it is needed and allow harvest where it is not; otherwise the choice is to protect all the populations or let the species go. Perhaps more important, is that while species are the fundamentally irreplaceable biological unit, it is on the population level that evolution—the wellspring of variety—takes place.

The protection and management of evolutionary processes is what the real concern is all about. Man is actively affecting the direction of evolution all over the planet by fragmenting wildlands and snuffing out evolutionary lines. Little of it is done with a conscious realization of its effects on evolutionary processes, many of which are incompletely understood.

That is why it behooves us to save as many of those products of evolution as are on hand, so that we can direct our effects on evolution more wisely and consciously. It is why, for example, it can be important to save certain obscure mollusks or earthworms because certain special evolutionary phenomena occur only in those species in the entire animal kingdom. That may be very difficult to explain to the average person whose life or children will nonetheless be affected by it all. But one would hope at least that person might be impressed that the problems of Rh-negative mothers are better understood because of genetic principles learned from a species of African butterfly.

And in closing, I would like to echo Director Greenwalt's comment about the effectiveness of the endangered species program internationally. It is clearly inadequate outside the United States. The problems of endangered species are exploding around the tropical belts of the planet and certainly deserve more attention. Thank you.

Senator CHAFEE. More attention from whom?

Mr. LOVEJOY. From everybody.

Senator CHAFEE. I mean, from us? We only can deal with certain areas. Are we not doing something we should be doing?

Mr. LOVEJOY. I am particularly concerned, of course, about the tropical rain forest regions of the world. They are getting increasing attention throughout Government. But it is also very clear most of the nations with those forests are not in a position to put out large sums to protect those resources, and that some help is going to have to come from developed nations of the world.

Senator CULVER. Could you help us as lay people to get a better grasp on some of the just superficial and general implications of what is taking place potentially of a dangerous nature in this rain forest area? I know your particular area of expertise, as I understand it, is in the Amazon Valley. Could you speak to that? What exactly is happening there and what dangers do you see in terms of alteration of that natural ecosystem there as a result of rain forest timber being extracted, and so on? What are the economics driving that? What countries in particular are involved?

Mr. LOVEJOY. I could sort of speak generally about tropical rain forests around the globe. Tropical rain forests simply do not respond in the same way as a temperate zone rain forest does to clearing. It does not come back rapidly in certain situations, which may be a large fraction of the rain forest region. They may never recover from this sort of thing. And in many situations, this is simply because the soils are not very good, which means that the land is not very good for anything else, either, after the first few years.

What really concerns so many of us in international conservation is that the vast bulk of species on the land of the planet occur in the tropical rain forests. The low estimate is about 25 percent of all species on the planet, which, if you then multiply it against the range of estimates as to how many species there are on the planet, you come out dividing, actually, 3 to 10 million by 4. So we are talking about a very large number of species.

The pressures are numerous. There are strong pressures by multinational lumbering companies, some with real consciences, about

what they are doing, and others not. Particularly significant in this group are Japanese and American concerns. There is small-scale colonization, small-scale in a sense of small landowners, but large numbers of them moving in, sometimes with deliberate national programs, sometimes just moving into a vacuum, looking for a better life. Pressures for firewood are enormously high in many of the Third World countries.

The actual estimate of how much the Amazon, for example, has been cut over is pretty fuzzy, too. It is anywhere between 10 percent to a third. And ultimately larger concerns arise about saving what is left in that the hydrological cycles of places like the Amazon Basin are partly tied up in vegetation themselves, so one could arrive at a point as yet undefined when you cut so much forests that the climate begins to dry out and you lose all the rest.

Then there is the larger, still fuzzy, question about what the release of that much carbon—as the tropical rain forests of the world represent the largest pool of stored carbon on land in the planet—would do to global levels of carbon dioxide. We know that carbon dioxide levels have been rising in the atmosphere for the past two or three decades. And some views hold that at least half of that increase comes from destruction of forests.

That, in turn, has potential to change climate, even in the temperate zone.

Mr. BORNEMAN. Mr. Chairman, could I speak to this, too? It reminds me of something I learned last year at the American Ornithologists Union. A young researcher was studying the instincts of two particular birds in the Amazon. I can't remember what they are right now. But he found that the disappearance of the forests in this mountain area was preceded by the loss of these birds through the feather trade, and through collecting. And he discovered that the loss of the forests came about because these birds were the only method for seed disbursement in that particular area. I thought that could really have large implications in the whole country.

Senator CULVER. How vigorous is any international governmental effort in this regard?

Everybody turns to the United States, of course, for leadership in the environment. To what extent, if any, is there sufficient political support to overcome the enormous economic necessities, at least felt necessary in terms of Third World countries? And in the alternative, are there funds available to alleviate those pressures so that at the same time we can afford the protections that you are sensitive to?

Mr. LOVEJOY. I would say at the moment that the UNEP program to address this can hardly even be called a program. It is pretty weak. And UNEP usually takes a long time to get rolling on anything. They certainly should be involved. But what we are involved in is something that is really happening right at the moment and very rapidly. And it requires faster action than we are accustomed to from that source.

I know that there are various efforts here in Washington to provide some help through AID land use planning kinds of loans to countries. I know, for example, that a potential natural resources loan from AID to Costa Rica, which happens to be an exemplary

nation in all this, certainly will include an element that sees that their wild lands are properly protected, and which are those that they should really hang on to.

I think that there are some isolated efforts like this which are just put together and are far from sufficient.

Now, there is a Tropical Rain Forest Interagency Group here in Washington that is reviewing this question and trying to develop policies.

I think it was initially undertaken by the State Department, which had a major conference last May on tropical deforestation here in Washington.

Senator CULVER. Has that been followed up by any particular initiatives or formal Government recommendations at the United Nations under U.S. sponsorship?

Mr. LOVEJOY. As of this moment, I don't think there is anything discrete of that sort. I understand that it is possible that there is going to be some reference to it if there is a Presidential environmental message. And I know there are going to be some recommendations later this week at some hearings at AID that have a formal element to be looked at.

Senator CULVER. I understand that under the President's new Executive order under NEPA, there are some specific directives to agencies such as the Export-Import Bank to take some of these things into consideration. Is that true?

Mr. LOVEJOY. Under the problem of resources of global importance? There is something there which ultimately could protect some of these natural areas from inadvertent or deliberate effects from U.S. Government programs. That in itself is not going to solve the entire problem, judging from the array of forces involved.

Senator CHAFFEE. Mr. Chairman, I have to go shortly, and I think this is very important and we have had several references to the whole problem of international effect on endangered species. But I would like to get back to Mr. Borneman's suggestion regarding these funds.

You don't say what they would be used for. The sums don't seem to me to be that large. Having served on the Human Resources Committee and the chairman serving on the Armed Services Committee, we find sums like \$731,000 modest, coming from committees where we round off in billions.

So what would you use this money for and what hope is there that it would help restore the condor population?

Mr. BORNEMAN. I think part of this is addressed in the report of the American Ornithologists' Union panel appointed by the Audubon Society, and it involves several recommendations. One is increased research monitoring of the movement of birds through radio telemetry, the captive propagation for future release into the wild.

One of the other aspects of this is to try to ascertain land use patterns in California and see if there are some kinds of cooperative agreements that could be made with landowners—one ranch in particular is about 290,000 acres—to assure that condors will have habitat to be released into, for instance, if captive propagation is the route we are going.

Senator CHAFEE. I would find it helpful if you would submit a detailed breakdown. Obviously a lot of thought has gone into this if you arrived at a figure as specific as \$731,000. At least that is a technique of making us think there is a lot of thought to that when you come to such a fine-tuning. And why would it run, what do you say here, 40 years? Have you got that material?

Mr. BORNEMAN. That material is here.

Senator CHAFEE. Where?

Mr. STAHR. I know your staff has been provided a copy of the Joint Audubon/AOU Report, and I believe also a copy of the Fish and Wildlife Service's revised recovery plan, which was just approved by Mr. Greenwalt about a month ago. I testified on this matter and submitted a budget to the Appropriations Subcommittees of both the House and Senate just a couple of weeks ago.

I do not have the material immediately at hand. I would be most happy to provide it, perhaps as early as this afternoon.

Senator CHAFEE. It doesn't have to be that early, but I, for one, am very sympathetic. I think it is a reasonable request, and this is an incredibly, I believe, significant bird, and I think we ought to make some effort for it. I think your request is a fair one if we can substantiate it.

What was the reaction, Mr. Stahr, of the Appropriation Subcommittees?

Mr. STAHR. I don't think they have acted, but in response to a letter from a constituent in California, one of the members of the House Committee said he had been very much impressed by the testimony and intended to support the proposal.

Senator CHAFEE. Nothing like a constituent's letter to make one sit up and take note.

Mr. STAHR. That does sometimes help.

Senator CHAFEE. If you would do that for one constituent's letter, what would he do for two constituents' letters?

OK. I would be interested. If you could see we receive that, I would appreciate it, because we are obviously going to have to mark up this thing pretty soon and we would like to have that.

Mr. STAHR. Could I have a word about the international thing, just quickly. There has been an effort going on for some months, though I am not immediately up to date on it, to make sure that we build into our administration of the Canal Zone during the period between now and the time it is turned back to the Republic of Panama—the Canal Zone has some important rainforests in it—to be sure that we take, while we are administering that area, proper steps for its preservation and that we negotiate with the Panamanians to continue that protection afterward.

Senator CULVER. I want to thank all of you very much for your excellent testimony today. It has been very helpful to the committee. We will look forward to working with you in the month ahead.

The committee will stand in recess until further call of the Chair.

[Whereupon, at 12:10 p.m., the subcommittee recessed, to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

STATEMENT OF

HON. JOHN J. DUNCAN

Resource Conservation Subcommittee,
Senate Environment & Public Works
Committee, April 3, 1979

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY TO DISCUSS THE REAUTHORIZATION OF THE ENDANGERED SPECIES ACT, AND A PROJECT IN MY CONGRESSIONAL DISTRICT THAT HAS BEEN AFFECTED BY THAT ACT; TVA'S TELlico DAM AND RESERVOIR PROJECT.

THE CASE IS WELL KNOWN, BUT I THINK A BRIEF REVIEW OF THE FACTS IS NECESSARY TO ILLUSTRATE THE FOLLY OF THIS UNFORTUNATE SITUATION.

TVA FIRST PROPOSED THE CONSTRUCTION OF TELlico DAM IN 1936 AS PART OF ITS OVERALL PLAN FOR THE TENNESSEE RIVER SYSTEM. ITS VALUE HAS ALWAYS BEEN AS AN EXTENSION THAT SUPPLEMENTS THE OPERATION OF THE LARGER FORT LOUDON DAM NEARBY. FUNDS FOR THE CONSTRUCTION OF TELlico WERE FIRST REQUESTED IN 1942, BUT

WARTIME FINANCIAL PRESSURES NECESSITATED POSTPONEMENT. IN 1963, THE NEED FOR THE TELlico PROJECT AS A FORT LOUDON EXTENSION WAS AGAIN REALIZED. DURING 1965-1966, THE CONGRESS HELD HEARINGS ON THE PROPOSAL AND BECAUSE OF THE COMMUNITY SUPPORT FOR THE DAM AND THE MERIT OF THE PROPOSAL, FUNDS WERE APPROPRIATED BY EVERY SUCCEEDING CONGRESS.

CONSTRUCTION BEGAN IN 1967, AND PROCEEDED AS PLANNED UNTIL BRIEFLY HALTED IN 1971. THE OBJECTIONS RAISED IN A LAW SUIT OVER THE PROPER DRAFTING OF AN ENVIRONMENTAL IMPACT STATEMENT WERE SATISFIED, AND CONSTRUCTION RESUMED IN 1973. THAT SAME YEAR, THE ENDANGERED SPECIES ACT BECAME LAW AND TWO YEARS LATER IT WAS USED TO ONCE AGAIN HALT THE CONSTRUCTION OF TELlico DAM.

IN OCTOBER 1975, THE U.S. FISH AND WILDLIFE SERVICE LISTED

THE SNAIL DARTER AS AN ENDANGERED SPECIES. IN FEBRUARY 1976, SUIT WAS FILED IN FEDERAL DISTRICT COURT TO ENJOIN TVA FROM FURTHER CONSTRUCTION ON TELlico DAM. IN APRIL, THE CASE WAS DISMISSED. ON APPEAL, HOWEVER, THE SIXTH CIRCUIT COURT OF APPEALS OVERTURNED THE DISTRICT COURT RULING, AND WORK THAT WOULD HAVE CHANGED THE SNAIL DARTER'S CRITICAL HABITAT WAS AGAIN HALTED. AT THIS POINT, THE PROJECT WAS OVER 90% COMPLETE.

THE CASE OF COURSE, EVENTUALLY WENT TO THE SUPREME COURT FOR REVIEW, AND ON JUNE 15, 1978, THE COURT ANNOUNCED ITS DECISION IN THE CASE OF HILL V. TVA. IT SUSTAINED THE COURT OF APPEALS RULING AND ENJOINED TVA FROM FURTHER CONSTRUCTION ON THE TELlico PROJECT.

THE EFFECT OF THIS UNNECESSARY AND UNFORTUNATE DELAY HAS BEEN CLEARLY, AND WITHOUT DOUBT, A NEEDLESS INCREASE IN COST.

WHEN TELlico WAS FIRST PROPOSED, THE PROJECT COST WAS \$10.7 MILLION. IN 1963, WHEN THE PROJECT WAS RE-PROPOSED, THE COST HAD INCREASED TO \$41 MILLION. NOW, OVER 15 YEARS LATER, AFTER MANY DELAYS, THE COST IS ESTIMATED TO BE OVER \$120 MILLION. IT IS LITTLE WONDER THAT OUR TAXPAYING CITIZENS ARE DISAPPOINTED IN A GOVERNMENT WHICH WORKS AT CROSS PURPOSES, AND LACKS THE FORTITUDE TO CARRY OUT A DECISION ONCE IT IS MADE.

THE MERITS OF THE PROJECT ARE AS VALID TODAY AS THEY WERE IN 1936. TIME AND DELAY HAS NOT ALTERED THAT. THE PROJECT WILL DIRECTLY BENEFIT THREE TENNESSEE COUNTIES-BLOUNT, LOUDON, AND MONROE- WHICH HAVE HAD A LONG HISTORY OF ECONOMIC DEPRESSION, PLAGUED WITH HIGH UNEMPLOYMENT AND THE OUT-MIGRATION OF ITS YOUNG PEOPLE. THE TELlico DAM AND RESERVOIR PROJECT WILL BRING MUCH NEEDED DEVELOPMENT TO THE AREA.

FIRST OF ALL, TELlico DAM WILL PROVIDE ELECTRIC ENERGY BY DIVERTING WATER FROM TELlico RESERVOIR THROUGH THE EXISTING FORT LOUDON DAM TURBINES. THIS ADDITIONAL FLOW WILL ENABLE FORT LOUDON TO GENERATE ANOTHER 200 MILLION KILOWATTHOURS OF ELECTRIC POWER, ENOUGH ENERGY TO HEAT A MINIMUM OF 20,000 HOMES. I WOULD LIKE TO POINT OUT TO THE COMMITTEE, THAT THIS IS THE EQUIVALENT OF BURNING 15 MILLION GALLONS OF OIL IN AN AVERAGE YEAR, A SIGNIFICANT FACT IN THE WAKE OF LAST WEEK'S NEWS THAT OPEC WAS HIKING ITS OIL PRICES AGAIN. FURTHERMORE, THIS IS MORE POWER THAN IS GENERATED BY 13 TVA DAMS.

SECOND, THERE IS THE FLOOD CONTROL BENEFITS. THE PLANNED RESERVOIR WILL PROVIDE AN EXTRA 126,000 ACRE-FeET OF FLOOD STORAGE CAPACITY. THIS WILL BENEFIT CHATTANOOGA WHICH LIES DOWN-STREAM. DAMAGE IN A 1973 FLOOD THERE COULD HAVE BEEN REDUCED

BY AT LEAST \$15 MILLION IF THIS ADDITIONAL STORAGE HAD BEEN AVAILABLE.

THIRD, THE EMPLOYMENT OPPORTUNITIES IN THE AREA WILL BE GREATLY ENHANCED BY THE CREATION OF TELlico RESERVOIR, COMMERCIAL NAVIGATION WILL BE EXTENDED 30 MILES UP THE LITTLE TENNESSEE RIVER TO ONE OF THE BEST INDUSTRIAL SITES IN EAST TENNESSEE. BY PROVIDING INDUSTRIAL SITES WITH ACCESS TO RIVER TRANSPORTATION AS WELL AS IMPROVED RAIL AND HIGHWAY ACCESS, AN ESTIMATED 6,600 JOBS WOULD BE CREATED ALONG THE RESERVOIR OVER A PLANNED 25 YEAR DEVELOPMENT PERIOD. IN THE YEARS PRIOR TO THE CONSTRUCTION OF TELlico DAM, MUCH OF THE LAND SURROUNDING THE PROJECT WAS BARREN OF DEVELOPMENT EXCEPT FOR A FEW CORN AND WHEAT FIELDS.

FINALLY, THERE IS RECREATION. A 16,500 ACRE LAKE WOULD

BE MADE AVAILABLE FOR PUBLIC USE THE YEAR ROUND. THE DEVELOPMENT PLAN SETS ASIDE 6,600 ACRES OF SHORELINE PROPERTY FOR RECREATIONAL USE, AND THIS TOO, MEANS JOBS.

IN FACT, THE EMPLOYMENT OPPORTUNITIES PROVIDED BY THE PROJECT'S COMPLETION IS ITS MOST DESIRED BENEFIT, AND THE PRIMARY REASON FOR LOCAL SUPPORT. LOW INCOME AND THE LACK OF EMPLOYMENT OPPORTUNITY HAS LED TO THE STEADY OUT-MIGRATION OF THE AREA'S YOUTH. BETWEEN 1950 AND 1970, ALMOST 20,000 PERSONS LEFT THE IMMEDIATELY AFFECTED THREE COUNTY AREA. THE VAST MAJORITY OF THESE WERE YOUNG AND PRODUCTIVE PEOPLE IN THE 15 TO 29 YEAR AGE GROUP. IN LOUDON AND MONROE COUNTIES, THE 1977 UNEMPLOYMENT RATE WAS 11.1% AND 15% RESPECTIVELY. IN SUM, TO THESE PEOPLE, TELlico DAM MEANS A LIVELIHOOD.

THERE SHOULD BE NO ILLUSIONS ABOUT THE EXTENT OF PUBLIC

SUPPORT FOR THE PROJECT'S COMPLETION. EVEN OPPONENTS OF THE DAM WOULD CONCEDE THIS POINT. ON SEVERAL OCCASIONS I HAVE SURVEYED PUBLIC OPINION ON THE TELlico PROJECT, AND EACH TIME SUPPORT OF COMPLETION HAS BEEN FOUND TO BE VERY HIGH. THE PEOPLE OF THE AREA CONSIDER IT TO BE UNJUST AND LUDICROUS THAT SERIOUS CONSIDERATION BE GIVEN TO PROPOSALS TO DISMANTLE A PROJECT THAT HAS CONSIDERABLE MERIT, AND ON WHICH MILLIONS OF DOLLARS HAVE BEEN SPENT.

IN MARCH 1977, I SOLICITED BY LETTER THE VIEWS OF THE CITIZENS IN THE IMMEDIATE THREE COUNTY AREA. THE RESULT WAS 1,537 FOR THE COMPLETION OF THE DAM, WITH ONLY 116 OPPOSED.

AGAIN, IN APRIL 1978, A POLL OF THE SECOND CONGRESSIONAL DISTRICT WAS TAKEN. IN ALL, 13,046 PERSONS RESPONDED, AND 82% FAVORED COMPLETION OF THE PROJECT WITH ONLY 14% OPPOSED, AND

4% UNDECIDED.

THE SUPPORT FOR TELlico DAM IS NOT JUST CONFINED TO THE SECOND CONGRESSIONAL DISTRICT, HOWEVER. THE TENNESSEE CONGRESSIONAL DELEGATION HAS WORKED TIRELESSLY TO DELIVER A PROJECT THAT THE RESIDENTS OF THE AREA GAVE THEIR HOMES AND LAND FOR. IN FACT, ON JANUARY 2, 1979, THE ENTIRE TENNESSEE CONGRESSIONAL DELEGATION - MYSELF, CONGRESSWOMAN MARILYN LLOYD BOUQUARD, CONGRESSMEN JIMMY QUILLEN, ROBIN BEARD, ALBERT GORE, JR., HAROLD FORD AND ED JONES, AND ALSO SENATORS HOWARD BAKER AND JIM SASSER - ALL SIGNED A LETTER SENT TO EACH MEMBER OF THE THE ENDANGERED SPECIES COMMITTEE, ADVOCATING THE EXEMPTION OF TELlico DAM FROM THE ENDANGERED SPECIES ACT, AND ITS IMMEDIATE COMPLETION.

EARLIER, ON MARCH 7, 1977, CONGRESSWOMAN BOUQUARD AND I INTRODUCED H.R. 4557, TO EXEMPT TELlico DAM FROM THE PROVISIONS

OF THE ACT.. I HAVE REINTRODUCED THIS LEGISLATION IN THE 96th CONGRESS AS H.R. 3289, AND IN THE SENATE, SENATORS BAKER AND SASSER HAVE SEPARATELY INTRODUCED BILLS TO EXEMPT TELLICO AND ALLOW ITS IMMEDIATE COMPLETION.

IN 1977, THE TENNESSEE GENERAL ASSEMBLY, BY A UNANIMOUS VOTE IN THE HOUSE, AND WITH ONLY TWO DISSENTING VOTES IN THE SENATE, PASSED A JOINT RESOLUTION ENDORSING THE COMPLETION OF TELLICO DAM.

BUT PERHAPS MOST IMPORTANTLY, THERE IS THE SUPPORT OF THE CONGRESS OF THE UNITED STATES. EACH YEAR SINCE 1967, THE CONGRESS HAS INCLUDED IN ITS APPROPRIATIONS, FUNDS FOR TELLICO DAM. FURTHERMORE, ON TWO RECENT OCCASIONS CONGRESS HAS SPECIFICALLY EXPRESSED ITS DESIRE THAT THE DAM AND RESERVOIR BE COMPLETED.

ON JUNE 16, 1978, THE HOUSE OF REPRESENTATIVES PASSED AN AMENDMENT TO THE PUBLIC WORKS APPROPRIATIONS BILL EXPRESSLY

PROVIDING FUNDS FOR THE COMPLETION OF TELlico DAM. NOTE THAT THIS CAME ONE DAY AFTER THE ANNOUNCEMENT OF THE SUPREME COURT DECISION AGAINST THE DAM IN HILL v. TVA. AGAIN ON OCTOBER 14, 1978, ON A ROLL CALL VOTE, THE HOUSE OVERWHELMINGLY APPROVED AN AMENDMENT TO THE ENDANGERED SPECIES ACT AMENDMENTS THAT WOULD HAVE EXEMPTED TELlico FROM THE PROVISIONS OF THE ACT.

FINALLY, THERE IS ALSO THE FACT THAT TELlico DAM HAS CONSISTENTLY BEEN INCLUDED IN BUDGET REQUESTS BY THE CARTER ADMINISTRATION, AS WELL AS PAST ADMINISTRATIONS. IT WAS NOT AMONG THE PROJECTS THAT THE PRESIDENT DESIGNATED FOR HIS SO-CALLED "HIT LIST" IN 1977, AND WHEN THE CASE OF HILL v. TVA WENT BEFORE THE SUPREME COURT, ATTORNEY GENERAL GRIFFEN BELL ARGUED FOR THE DAM'S COMPLETION.

SINCE THE CONGRESS PASSED THE ENDANGERED SPECIES ACT

AMENDMENTS IN OCTOBER 1978, THERE HAVE BEEN MORE DEVELOPMENTS IN THIS CASE. AS YOU WILL RECALL, TELlico WAS ONE OF THE TWO PROJECTS GIVEN AN EXPEDITED REVIEW BY THE ENDANGERED SPECIES COMMITTEE AS CREATED BY THE ACT. PRESIDENT CARTER SIGNED THE ACT INTO LAW ON NOVEMBER 10, AND THE ACT PROVIDES THAT THE COMMITTEE WAS TO BEGIN ITS CONSIDERATION WITHIN 30 DAYS OF THE ACT BECOMING LAW. BY DECEMBER 10, THE COMMITTEE WAS NOT YET ORGANIZED. IN FACT, IT WAS NOT UNTIL DECEMBER 11, THAT GOVERNOR RAY BLANTON FINALLY SUBMITTED THE NAMES OF FIVE NOMINEES TO PRESIDENT CARTER FOR HIS SELECTION. AND IT WAS NOT UNTIL JANUARY 10, THAT THE TENNESSEE REPRESENTATIVE WAS APPOINTED. THIS WAS AFTER THE PUBLIC HEARINGS HAD BEEN CONDUCTED, AND I DO NOT BELIEVE THAT THE TENNESSEE REPRESENTATIVE HAD AMPLE TIME TO CONSIDER THE VOLUMES OF MATERIAL DEALING WITH THE MATTER. MOREOVER, I CONTEND THAT WITHOUT THE PRESENCE OF THE STATE REPRESENTATIVE

ON THE COMMITTEE, IT COULD NOT LEGALLY FUNCTION. THE ACT STATES THAT, (AND I QUOTE) "THE COMMITTEE SHALL, WITHIN 30 DAYS OF THE DATE OF THE ENACTMENT OF THE ENDANGERED SPECIES ACT AMENDMENTS OF 1978; PROCEED TO CONSIDER THE EXEMPTION OF THE TELlico DAM AND RESERVOIR PROJECT ..." THE ACT DOES NOT STATE THAT THE COMMITTEE, EXCEPTING THE MEMBER FROM TENNESSEE, SHALL PROCEED TO CONSIDER. ANY REASONABLE PERSON WOULD INTERPRET THIS PASSAGE TO MEAN THE ENTIRE COMMITTEE, WITH EACH MEMBER BEING GIVEN EQUAL TIME FOR STUDYING THE RECORD, AND ACCESS TO THAT RECORD.

I HAVE OBTAINED NO EXPLANATION FROM THE ADMINISTRATION AS TO WHY IT TOOK OVER A MONTH FOR THE PRESIDENT TO APPOINT TENNESSEE'S REPRESENTATIVE TO THE COMMITTEE. WE WOULD ALL AGREE THAT SUCH AN APPOINTMENT SHOULD BE MADE ONLY AFTER A CAREFUL CONSIDERATION OF THE FACTS. BUT TO DELAY SUCH AN APPOINTMENT WHEN A DECISION IS PENDING, AND WHILE THE OTHER MEMBERS HAVE HAD

AT THE TIME, OVER A MONTH TO COSIDER THE EVIDENCE, IS INEXCUSABLE
AND SETS A VERY BAD PRECEDENT.

THERE ARE OTHER FACTS RELATED TO THE REVIEW PROCESS THAT
DISTURB ME, AND I WILL MENTION THEM BRIEFLY BEFORE MOVING ON.
FIRST, ON A SEVEN MEMBER BOARD, A SIMPLE MAJORITY VOTE SHOULD
BE THE RULE, RATHER THAN REQUIRING FIVE OF THE SEVEN MEMBERS VOTE
FOR AN EXEMPTION. THE U. S. SUPREME COURT, WHICH MAKES CON-
STITUTIONAL AND SOCIAL DECISIONS VITAL TO OUR LIBERTY, CAN DE-
CIDE A CASE BY A SIMPLE MAJORITY VOTE. ALSO, IT SEEMS TO ME THAT
THE MAKE-UP OF THE PANEL IS DECIDEDLY TO THE ADVANTAGE OF THOSE
INCLINED TO SEEK A HALT TO PROJECTS THAT WOULD BRING ECONOMIC
DEVELOPMENT TO A REGION SUCH AS THE AREA IN THIS CASE. I WOULD
STRONGLY URGE THAT THIS SUBCOMMITTEE INVESTIGATE THE STRUCTURE
OF THE REVIEW PROCESS IN GENERAL, AND THE WAY THE TELlico REVIEW
WAS CONDUCTED IN PARTICULAR.

MR. CHAIRMAN, THERE ARE SIX FINAL POINTS THAT SHOULD BE MENTIONED, AND I WILL BEGIN BY QUOTING A STATEMENT MADE BY DR. ROBERT K. DAVIS OF THE DEPARTMENT OF THE INTERIOR AT THE JANUARY 23 MEETING OF THE ENDANGERED SPECIES COMMITTEE.

DR. DAVIS SAID, "THE PROJECT WHICH CONSISTS OF A CONCRETE AND AN EARTHEN DAM WOULD INUNDATE THE ONLY HABITAT IN WHICH THE SNAIL DARTER IS KNOWN TO SURVIVE." HOW HE COULD HAVE TRUTHFULLY MADE SUCH A STATEMENT IS A TOTAL MYSTERY TO ALL THOSE FAMILIAR WITH THE FACTS OF THIS CASE. DR. DAVIS IS REFERRING TO THE LITTLE TENNESSEE RIVER WHICH FOR ALL INTENTS AND PURPOSES IS NO LONGER THE CRITICAL HABITAT OF THE SNAIL DARTER. TVA'S PROGRAM TO TRANSPLANT THE SNAIL DARTER IN THE NEARBY HIWASSEE RIVER HAS BEEN HIGHLY SUCCESSFUL, A FACT WHICH THE INTERIOR DEPARTMENT HAS NOTED. THE SNAIL DARTER POPULATION HAS FLOURISHED IN THIS NEW HABITAT WHILE IT CONTINUES TO DECLINE

IN THE LITTLE TENNESSEE. IN FACT, THE TVA REPORT ON TELlico NOTED THAT EVEN WITHOUT IMPOUNDMENT, THE SNAIL DARTER POPULATION IN THE LITTLE TENNESSEE WOULD NOT BE REPRODUCTIVELY VIABLE IN THE NEXT ONE TO TWO YEARS. I WOULD NOTE AS WELL, THAT LAST FALL, A SECOND TRANSPLANT INTO THE HOLSTON RIVER TOOK PLACE, AND THE FISH WERE TAKEN NOT FROM THE LITTLE TENNESSEE POPULATION, BUT FROM THE THRIVING HIWASSEE POPULATION.

SECOND, THERE IS THE FACT THAT TELlico DAM IS MORE THAN 95 PERCENT COMPLETE AND HAS BEEN READY TO CLOSE SINCE JANUARY 4, 1977.

THIRD, THROUGH MAY 1978, \$109 MILLION HAS BEEN SPENT ON THE PROJECT.

FOURTH, ESTIMATES GIVEN IN 1977 SHOWED THAT REMOVAL OF THE DAM WOULD COST OVER \$16 MILLION. BECAUSE OF INFLATION, THAT ESTIMATE NOW, WITHOUT DOUBT, IS A CONSERVATIVE ONE.

FIFTH, THERE HAS BEEN TALK OF REMOVING TELlico DAM AND ALLOWING THE LITTLE TENNESSEE RIVER TO BECOME "FREE FLOWING" AGAIN. SUCH AN ARGUMENT IS GROUNDLESS. FOR THE LITTLE TENNESSEE TO RETURN TO A "FREE FLOWING" STATE, WOULD REQUIRE NOT ONLY THE REMOVAL OF TELlico DAM, BUT FOUR OTHER DAMS AS WELL.

FINALLY, COMPLETION OF THE DAM AS ORIGINALLY PLANNED IS STILL THE MOST ECONOMICAL SOLUTION. THE CREATION OF A RESERVOIR WILL ATTRACT INDUSTRIAL DEVELOPMENT TO THE AREA. THAT MEANS STABLE, YEAR ROUND EMPLOYMENT, NOT THE SEASONAL EMPLOYMENT THAT MIGHT COME WITH SOME SORT OF RIVER DEVELOPMENT. IN FACT, THE RIVER DEVELOPMENT PROPONENTS HAVE NEVER STATED HOW THEIR PLAN WILL REVERSE THE UNEMPLOYMENT AND OUT-MIGRATION TRENDS IN THE AREA. THEY MAKE REFERENCE TO SEASONAL AGRICULTURAL EMPLOYMENT AND SOMETHING CALLED A "ENVIRONMENTAL EDUCATION

CENTER." THIS MAY BE DEVELOPMENT, BUT IT'S NOT THE TYPE OF DEVELOPMENT NEEDED IN THIS AREA.

MR. CHAIRMAN, DESPITE THE DECISION BY THE ENDANGERED SPECIES COMMITTEE NOT TO GRANT AN EXEMPTION FOR TELlico, IT IS NOT TOO LATE TO ACT TO SAVE THE PROJECT FROM DESTRUCTION. ITS BENEFITS CAN STILL BE REALIZED, AND THE CITIZENS OF THE AREA ARE STILL WORKING WITH THAT GOAL IN MIND. ON MARCH 26, 1979, CITIZENS OF THE THREE AFFECTED COUNTIES PETITIONED THE SIXTH CIRCUIT COURT OF APPEALS FOR A REVIEW OF THE ACTION BY THE ENDANGERED SPECIES COMMITTEE IN DENYING AN EXEMPTION TO TELlico DAM AND RESERVOIR. BOTH SENATOR BAKER AND I HAVE SPONSORED LEGISLATION TO BRING ABOUT THE DAM'S COMPLETION, AND ARE PLEDGED TO ASSIST OUR CONSTITUENTS IN THIS ENDEAVOR. I HEREBY CALL ON THE MEMBERS OF THIS SUBCOMMITTEE TO AID US

AND THE PEOPLE OF EAST TENNESSEE, AND BRING THIS UNFORTUNATE
SITUATION TO A FRUITFUL CONCLUSION.

THANK YOU FOR YOUR TIME, AND FOR ALLOWING ME TO APPEAR
BEFORE YOU THIS MORNING.

STATEMENT OF THE HONORABLE ROBERT HERBST, ASSISTANT SECRETARY FOR FISH AND WILDLIFE AND PARKS, DEPARTMENT OF THE INTERIOR, BEFORE THE SENATE COMMITTEE ON PUBLIC WORKS AND THE ENVIRONMENT, SUBCOMMITTEE ON RESOURCE PROTECTION, APRIL 3, 1979.

Mr. Chairman, it is a pleasure for me to be here today to testify on authorizations to extend the Endangered Species program.

At the outset, I believe it would be helpful to put the Act into a historical context. In a day where it is almost impossible to read the newspaper without seeing the term endangered species applied to everything from corner grocery stores to the family farm, it is hard to believe that prior to 1966, the number of people who were concerned about endangered species was small and limited mostly to biologists and members of conservation groups. Since the first Endangered Species Act was signed in 1966, the program has been subject to three major legislative revisions.

The first Act, passed in 1966, staked out some important principles, but provided little substantive protection for endangered species. It directed the Secretary to draw up a list of native fish and wildlife found to be threatened with extinction. It also directed three cabinet level departments to "seek to protect endangered native species." However, these Federal departments were asked to preserve habitats of such species on lands under their jurisdiction only insofar as it was practicable and consistent with their primary purposes.

Finally, it authorized the expenditure of funds from the Land and Water Conservation Fund to acquire habitat for listed species. Three years later Congress passed a law putting some more teeth in the program.

The Endangered Species Conservation Act of 1969 made a number of critical definitional changes, and, most importantly, banned the importation of endangered species, a move to close the United States as a marketplace for endangered wildlife. In addition, Lacey Act coverage was expanded to allow for the control of interstate traffic in endangered species parts and products.

Under the 1969 Act, the Service could conduct programs for enhancement and recovery of listed species and our programs could also include public education and technical assistance--but not funds--to foreign countries. The Endangered Species Act of 1969 was seriously flawed by the requirement that a species be in danger of worldwide extinction before it could be put on a list. Nonetheless, the Act was a big step forward. It established the principle that trade in and movement of endangered species should be regulated and set up a basic mechanism to accomplish this.

During the years between 1969 and 1973, public interest in bolstering the Act grew, mainly as citizens became aware of a critical fact that wildlife biologists had known for years--that to protect a species in the wild, it is necessary to protect its habitat. Widespread concern about rampant habitat destruction was translated into a new purpose expressed in the beginning of the 1973 Act: "...to provide means whereby the ecosystems upon which endangered species and threatened species may be conserved..." To protect habitat, the Act contained what may be the two most controversial sentences in the history of the conservation movement, the short paragraph known to everyone simply as "Section 7." That section contained two Service responsibilities that now constitute a major part of the Service's Endangered Species program--consultation and the designation of critical habitat. The first concept, which requires agencies to consult with the Secretary to ensure that proposed projects do not jeopardize endangered species or adversely modify critical habitat, has involved the Service in thousands of decisions relating to development projects. Many projects have been cleared as having no effect on endangered species. Many others, and this is the true value of the consultation process, have undergone modifications, often quite minor, that have allowed species to survive and projects to continue. A very few projects have been stopped.

The second concept, "critical habitat," goes directly to the conviction that habitat is the key to conserving endangered species. The designation of critical habitat has also become a major part of the program, and 33 such habitats have been listed.

The 1973 Act also substantially changed the listing process, allowing the listing of distinct populations of species endangered over all or a substantive portion of their range. It provided for the listing of animals as threatened to allow for varying degrees of protection for species that may become endangered in the future. The Act also expanded the authority for recovery programs, made the taking or harvesting of endangered or threatened species a Federal offense, established a program of grants to States and made the United States a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Since 1973, there has been considerable progress made in protecting threatened and endangered species. In 1973, there were 49 whooping cranes in the wild; there are now 84. In the same period, the Aleutian Canada goose population has gone from 700 to 1500; the Everglade kite

population from 47 to 160 and the Puerto Rican parrot population from 12 to 28. The populations of some species which were declining have stabilized. These include the bald eagle, peregrine falcon, Attwater prairie chicken and Kirtland's warbler.

We have also had a number of disappointments. Despite our efforts, the California condor population continues on a slow decline, decreasing from 40 in 1973 to less than 30 today. The red wolf is now probably extinct in the wild; although initial experiments at reintroduction have given us some reason for optimism. The dusky seaside sparrow has gone from approximately 650 in 1971 to 24 today.

During this period there has also been some controversy. We have been accused by some of using the Act to stop projects, and by others of not listing species that might stop projects. We have been charged, sometimes by the same people, both of being politically naive in listing species and not listing species for political reasons. We have gone too slowly for some and far too fast for others. Amidst the controversy, we have listed over 600 species, 197 of them domestic. Critical habitat has been designated for 33 species. We have developed and are implementing recovery plans for 19 species. There have been over 800 formal consultations, thousands of informal consultations, four major court cases and one Supreme Court decision.

In 1978, the Act was amended again. In three of the major components of the Endangered Species Program--listing, consultation and recovery--major changes have been made.

In our view, the changes in the listing process and the designation of critical habitat are perhaps more significant than the creation of the exemption process. Listing species of plants and animals as endangered or threatened and designating their critical habitat is the most basic function of the Endangered Species program, since species must be listed before they can receive the protection and other benefits afforded under the Act. New Section 4 regulations have been drafted and are now proceeding through the departmental review process. These regulations will include provisions for publication of critical habitat and listing proposals in scientific journals and in local newspapers, and provisions for public hearings and meetings.

One of the changes made by the 1978 amendments and which will be addressed in the regulations is the requirement that we consider economics and other factors prior to designating critical habitat. Previously, we were limited to addressing the biological needs of the species. Efforts are now underway to develop the process needed to fulfill this mandate for the many species needing habitat protection. Secretary Andrus has directed that an option paper be presented to him by April 6, 1979, outlining alternative procedures for considering economic impacts in critical habitat designations.

On March 6, 1979, we formally withdrew all pending proposals to designate critical habitat in order to carry out the procedural requirements mandated by the 1978 Act. At the same time we announced that proposals to add some 2000 species, largely plants, to the list will not be made final until the proposals have been supplemented with additional information.

The 1978 amendments also require us to review all of the listed species at least every five years to determine if any change in status is warranted. We are now making preparations to conduct the first such review which will address all those species listed up through 1974.

The consultation process has been substantially strengthened by the 1978 amendments. We are now more directly involved at the initial stages of Federal planning, providing lists of species in the areas of proposed activities and advising agencies as to the need for consultation. A concerted effort is being made to keep abreast of Federal agency actions to insure that consultation is initiated at the earliest possible time, thereby reducing delays in agency actions.

We are working with other Federal agencies on the new Section 7 requirements. Specialists from our Washington and regional offices have met with representatives of dozens of Federal agencies during the past several months to discuss new consultation procedures and apprise them of the newly established exemption process.

We are also attempting to speed up the consultation process. Once consultation is initiated, special teams are often appointed to conduct a prompt and thorough review of the potential impacts of proposed Federal activities. Upon the completion of consultation, our biological opinions are taking a different form, now detailing any anticipated impacts of projects on listed species, addressing cumulative effects and describing reasonable and prudent alternatives to agency actions that would avoid jeopardy to listed species or their habitats. A working group of representatives from our Service, the National Marine Fisheries Service and our Departmental Solicitor's Office has drafted regulations to put us in compliance with new Section 7 requirements.

In accordance with new requirements of the 1978 amendments, recovery plans must now be prepared for all species that will benefit from recovery activities. To meet this goal, our regional offices are

formulating recommendations on recovery needs for individual species, methods of plan preparation, appropriate time frames, and coordination of land acquisition and research. All recovery plans will be prepared in line with priorities such as degree of threat, recovery potential, and taxonomic status.

Recovery teams are being appointed for those species for which it appears advantageous, whereas other plans will be prepared through contractual arrangement, or by Service experts and other specialists. During March, we conducted a workshop to discuss our recovery planning guidelines, and expect to complete them very soon.

During FY 1978, nine new recovery plans were approved, bringing the total to 19 completed plans, another 51 plans are in various stages of development. In all more than 60 recovery teams have been appointed to chart recovery plans for 75 listed species.

Mr. Chairman, we will continue, as we have in the past, to do our best to implement all of the provisions in the Act and carry out the strong congressional mandate to preserve endangered species.

We do not expect any appreciable reduction in the amount of controversy that will surround this program. We will do our best, through the consultation process, to avoid conflicts between endangered species and projects, and we will continue to remind people that the purpose of the Act is to protect rare animals and plants -- not stop projects. But inevitably conflicts will arise, and regardless of the result of the exemption process, there will be those who will argue for special exemptions or that the Act itself should be gutted. The temptation to do so is often very great, as the match-ups often appear to some people to be outwardly ludicrous -- eagles versus refineries, kites versus powerlines, a three inch fish versus an eighty foot dam--until one realizes that the species protected are part of the fabric of life itself. To preserve endangered species is to maintain genetic diversity in a world growing increasingly monotypic, to preserve the biological support system that ultimately supports man himself, and to protect unique and often valuable life forms against the awesome finality of extinction.

Mr. Chairman, the Administration has requested that legislation be introduced that would authorize \$19,332,000 to be appropriated for fiscal year 1980, and such sums as may be necessary for fiscal years 1981 and 1982. Consequently, as in the past, priorities will be established within the program to best utilize our resources and provide protection for the most critically endangered species.

With regard to the bills introduced to abolish the exemption process and exempt the Tellico and Columbia dams from the provisions of the Act, we defer to Mr. Silverman, who is representing the Secretary here today on matters regarding the exemption process.

Before I close, I would like to comment on the draft report of the Government Accounting Office which, as you know, is critical of the operation of the Endangered Species progra. While there are some valid criticisms in the report, many of the findings, and hence the conclusions, are simply inaccurate. We are preparing a detailed response to the Draft Report that will be sent to GAO next week.

I am sincerely concerned that the premature release of the draft GAO report without adequate agency consultation calls into serious question the purpose and intent of the report and hampers an objective and accurate evaluation of the program. I am quite certain that if GAO objectively reviews our detailed and factual response to their proposed draft report, the final report will be substantially changed and far more favorable to the program.

That concludes my prepared testimony, we will be happy to answer any questions you may have.

An Opinion

WHO'S TO PLAY GOD?

The following is an excerpt of the address given July 19 at the Isaak Walton League national convention by Robert L. Herbst, assistant secretary of the Interior for fish, wildlife, and parks. — The Editor

Let me turn to a troublesome issue involving the environment and development — the Endangered Species Act. Recently, a reporter called me about an announcement by the Department of the Interior that the pupfish would be extinct.

His opening question was, "Mr. Secretary, who the hell gives a damn about the pupfish? I mean, why should we really care? I can't even smell it, feel it, or see it. Who cares?"

My immediate thought was "God, the Creator of all living things, does! I do, and others do." I asked him if he'd like to see the eagle, buffalo, and whooping crane become extinct. His answer was "No, but then they are different." My thought was "Why? Who is to decide which species should stay and which ones man should exterminate? Where should we draw the line and who should draw it?"

He also said, "Worthless, silly species can hold up very important projects providing hundreds of jobs." I asked him to give me an example, and I received the expected answer. "The snail darter is worthless and it has stopped the Tellico Dam." My immediate thought was, "Who says the snail darter is worthless? But an equally or more important question is, who says the Tellico project is wonderful and what is the documentation? Maybe it is wonderful, but it needs examination. What will it really do *beneficially* and what other *detrimental* effects would it have? Do you know that it would flood over 16,000 acres of farmland and many Indian sites?"

Maybe the situation can be resolved? Maybe we can have both the fish and the dam, or maybe we can have something as good or better than the dam? But the question of what good are species of life is a good one. Let's examine a possible answer.

To me, first, regardless of your religion, most people agree that creation took place and all forms of life were created for a purpose and a place in the natural order. And,

as such, what right do we have to purposefully eliminate a life form?

Second, the natural order really constitutes a second reason—all life is a part of a local or broader ecosystem. One spoke from the wheel, so to speak, makes the web of life weaker. Too many spokes gone and the wheel collapses.

Third, the quality of life in our nation constitutes all of our environment. And, very importantly, plants and animals can be indicators of environmental quality and even human life itself—the canary in the coal mine concept. The presence of DDT in the tissues of most living things worldwide indicated something was wrong, which led to its control.

Lastly, life may have an economic value now but, if it doesn't, there is no reason to accept our present ignorance on its value. Scientists may yet uncover a value in years to come.

Penicillin was a mold on cabbage.

Sponges in coastal waters recently yielded a drug to control certain virus infections.

Rubber from trees was discovered only relatively recently. I could go on with numerous other examples.

Suffice it to say, new drugs, treatment measures, chemicals, and beneficial uses are being discovered every year. Most are from the little known forms of animal and plant life. Once extinct, all these values and potentials are lost forever.

I suppose we could ask the same question of human life, couldn't we? What is it worth?

Boiled down, maybe we're worth a few dollars of chemicals. Of course, we could say we're worth more as we have a certain talent, such as writing—but then so do many others.

We are all replaceable, there is no indispensable man. In fact, some have said human life is like a thumb in the ocean, a dent and occupation of space while there, but once gone, it's difficult to see a change in water level.

Of course, we all know better. Each individual is important and can make a difference. Human life is valuable, sacred, and cherished. But I submit, so is all life.

OA: The Inside View

This issue we're pleased to add Oliver Houck to our list of contributors. Houck, an attorney, is director of the National Wildlife Federation's Resources Defense Division. His article on mitigation, which originally appeared in the Army Corps of Engineers magazine *Water Spectrum*, is a penetrating essay about the shortcomings of mitigation planning in the past and the urgent need for policy reform.

The September/October issue also includes a special feature about a unique project the League has entered into with the citizens of Teton County, Wyoming, to preserve open ranchlands there from development by purchasing scenic easements.

The League has been involved in land management projects in Jackson Hole—part of Teton County—twice before. This new venture in effect marks phase three of what has been

and undoubtedly will remain an continual effort to protect the land and wildlife of Jackson Hole from encroachment by man.

Elsewhere, Joan Cone writes about easy-to-prepare camping recipes, and Sig Olson tells about the time he went flyfishing for trout and had pride give way to old-fashioned common sense. Anglers take note.

—F.V.

Outdoor America
Sept/Oct 1978

Statement of
Terry L. Leitzell
Assistant Administrator for Fisheries
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
before
Subcommittee on Resource Protection
Committee on Environment and Public Works
United States Senate
April 3, 1979

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before this Subcommittee to discuss the Administration's proposal to extend the authorization for appropriations to carry out the Endangered Species Act of 1973. Effective implementation of the Act is vital to the survival and enhancement of the populations of those species of fish, wildlife, and plants that are either endangered or threatened with extinction.

Except for financial assistance to the States, under Section 6, authorization of appropriations under the Endangered Species Act for the Departments of Commerce and the Interior is provided for by Section 15

of the Act. This authorization for general appropriations is scheduled to expire on March 31, 1980. It must be extended for the Federal government's endangered species conservation program to continue.

The Department of Commerce recommends extension of Section 15 appropriations authorization to this agency in the amount of \$2,420,000 for the full fiscal year 1980 and such sums as may be necessary for fiscal years 1981 and 1982. The FY 1980 amount represents our budget request submitted to Congress.

The National Marine Fisheries Service (NMFS) of the National Oceanic and Atmospheric Administration (NOAA) is responsible for developing and maintaining conservation programs for fish, wildlife, and plant species of the marine environment. Various species of whales, seals, sea turtles, and sturgeons are presently threatened with extinction. Protection and enhancement of the populations of these species, as well as any additional marine species which may be listed in the future, through conservation practices, is an important public objective.

The Endangered Species Act was amended last year to place increased responsibilities on the implementing agencies. For example, we must now declare critical habitat at the time of original listing of a species to the maximum extent prudent. We must now provide procedures for extensive public participation and review. Strengthened requirements for interagency cooperation and Section 7 consultations have been added, including earlier and more extensive exchanges of data and analyses on potential impacts. I believe all of these improvements to the Act

contained in the Amendments of 1978 will assist in the smoother implementation of the requirements and lead to better analyses of all potential impacts of various listings of species as threatened or endangered. But this requires a modest budget increase.

The FY 80 budget request of \$2,420,000 submitted to Congress by the NMFS for the endangered species program shows a net increase of \$125,000 over the FY 80 adjusted base of \$2,295,000 for endangered species conservation. This is an increase of almost \$1 million over the 1978 funding level of \$1,599,000. The base programs for FY 80 and the increases and decreases for FY 80 are summarized as follows:

—Endangered Species Program Administration. The program is managed and coordinated in the NMFS headquarters in Washington, D.C. Basic administrative functions of the program include policy development, program review and coordination, development of regulations, and review of other Federal agency actions. In addition to salaries, administrative costs include travel, public hearings, printing, and occasionally contract support.

—Endangered Species Enforcement. Enforcement activities include investigation and control of illegal taking as well as control over imports and exports. The focus of our enforcement efforts has been against illegal shipments of parts and products of endangered and threatened species. This has resulted in increased use of seizures, forfeitures and fines in recent years. Increasing the public awareness of Federal controls has also been emphasized.

--Endangered Species Research. The program of our endangered species research efforts has been on endangered and threatened sea turtles, endangered whales, endangered seals, and the functions of recovery teams for sea turtles and for the shortnose sturgeon.

Sea turtle research is presently focused on developing an excluder panel on shrimp trawls to reduce the incidental catch of sea turtles while at the same time not unduly reducing the catch efficiency of the trawls. Other research on sea turtles seeks to understand more fully their population dynamics, migratory patterns, life histories and distributions. Research is also being conducted to determine and characterize habitats which may be critical to these species. For FY 80, we are requesting an increase of \$619,000 in order to augment the excluder panel gear research program and to conduct expanded sea turtle biological research consisting of stock assessments, tagging studies for migration and population estimates, and coordination with local conservation groups on nest relocation and headstarting programs. This entire program is being carried out in consultation and coordination with interested environmental groups and the shrimp industry.

Studies on endangered seals are decreasing in FY 80 as ongoing efforts are completed but we will continue to monitor the current population sizes and trends of the Hawaiian monk seal and the Guadalupe fur seal. These projects include making a census, studying behavior and investigating factors acting to limit recovery of the stocks. We are also doing limited work on the life history and population dynamics of

the northern elephant seal.

We are making only a limited budget request under this Act of \$893,400 out of a total NOAA budget of \$1,593,400 for endangered whales. As these mammals are included under this Act and also under the Marine Mammal Protection Act of 1972. We use both sources of funds for relevant research. Included in this research are stock assessments, intensified studies on gray and humpback whales, whaling observer programs, and other activities recommended by the International Whaling Commission (IWC) for the International Decade of Cetacean Research. Whale stock assessment data on harvests, biology (age, growth, and reproductive history) and tagging assist in the determination of the current status of exploited stocks throughout the world. The gray and humpback whale projects provide estimates of present size and distribution, migration routes, recovery from past exploitation, and possible future vulnerability. Such information assists our efforts at enforcing our programs to reduce harassment of breeding congregations.

The bowhead whale research project assesses the current population size, trends, and status of bowheads on the north slope of Alaska. The program monitors the native harvest to collect biological data.

Coordinated vessel and aerial surveys determine distribution and migration patterns, and then are correlated with data obtained from counting stations established along the ice leads through which the bowheads migrate. Analysis of historical commercial whaling vessel logbooks is being completed to obtain estimates of pre-exploitation

population size.

--Recovery Teams. Included in our budget request is \$20,800 to fund our Recovery Teams for the endangered shortnose sturgeon and for the six species of endangered and threatened sea turtles. These teams are charged with producing Recovery Plans which will help to restore the stocks of these species and consist of both government and private sector representatives. The team members generate and exchange data, review technical reports, identify research and management needs and generally advise on conservation efforts.

--Listing of Species. We are in the process of proposing the listing of several additional marine species as threatened or endangered, namely: 1) the totoaba, a large croaker fish from the Mexican waters of the Gulf of California, whose depletion is partially attributable to past commercial catches and some importation into the U.S.; 2) the Caribbean monk seal, which may be extinct but will be listed in order to afford protection to any populations which may still occur in isolated localities in the Caribbean; and 3) the Guadalupe fur seal, which occurs in low population numbers on one of the Channel Islands off southern California.

--Interagency Cooperation. The legal, biological and and managerial staffs of this agency are working closely with the Department of Interior (DOI), specifically the Fish and Wildlife Service (FWS) to develop joint regulations to implement the requirements for Section 7 consultations between Federal agencies. These joint regulations are now

in draft form and in the process of being cleared by both agencies prior to distribution. NOAA and DOI have also begun to develop joint regulations for Section 4 of the Act dealing with determinations and listings of endangered and threatened species. Finally, the Department of the Interior and NOAA have published proposed regulations describing procedures for applications for exemptions to the requirements of Section 7 of the Act.

—Cooperation with the States. For our Section 6 authorization request, the FY 80 budget suggests a decrease of \$300,000 for matching grant funds for States to conduct research on endangered species. In our zero base budget review, this program was not considered of sufficient priority in relation to other programs, such as bowhead and excluder panel research and development.

—Interagency Coordination. Finally, we provide information and analyses as requested by the Administrator of NOAA in his role as one of the seven members of the Endangered Species Committee.

The Subcommittee has requested that I comment in particular on the recent proposals for the exemptions of the Tellico Dam and Grayrocks Dam from endangered species listing as well as in general on the exemption process and new measures to amend the Act.

Three bills are presently under consideration in the Senate:

S. 242 "To amend the Endangered Species Act (16 USC 1530 et seq.)

by eliminating the Endangered Species Committee."

S. 243 "To exempt the Tellico Dam project of the Tennessee Valley Authority from the provisions of Section 7 of the Endangered Species Act," and

S. 298 "To amend the Endangered Species Act of 1973 to eliminate the Endangered Species Committee and provide for certain exemptions from the provisions of the Act." (Tellico and Columbia dam and reservoir projects in Tennessee).

NOAA is opposed to the enactment of these bills.

The amendments enacted in November of 1978 are important additions to the Endangered Species Act and we are firmly committed to their implementation. The recent actions of the Endangered Species Committee reflected the desire of Congress to have conflicts resolved after a thorough evaluation of all relevant biological, social, and economic criteria. The Endangered Species Committee considered both the Tellico Dam project and the Grayrocks Dam project and rendered what we believe to be appropriate and desirable decisions in light of the standards established by the Act and the 1978 Amendments. In our view the Endangered Species Committee should not be abolished. Thus, we oppose any statutory exemptions from the Endangered Species Act for the Tellico Dam project or the Columbia Dam and Reservoir project.

A final note on this Act and international responsibilities. Our

program functions are directly related to the species on the List of Endangered and Threatened Wildlife and Plants, included in the Appendices to the Convention on the International Trade in Endangered Species of Wild Fauna and Flora, or under consideration for possible addition to Convention lists.

We are seeking to carry out our international and domestic responsibilities in a fair, comprehensive, balanced, and expeditious manner. Extension of appropriation authorizations to the Department of Commerce is necessary if we are to carry out these responsibilities.

Mr. Chairman, I will be pleased to answer any questions you may have.

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

FOR RELEASE ON DELIVERY
EXPECTED AT 9:00 A.M. ON
TUESDAY, APRIL 3, 1979

STATEMENT OF
HENRY ESCHWEGE, DIRECTOR
COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION
UNITED STATES GENERAL ACCOUNTING OFFICE

BEFORE THE
SUBCOMMITTEE ON RESOURCE PROTECTION
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ON

THE ENDANGERED SPECIES PROGRAM

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

WE ARE HERE TODAY AT YOUR INVITATION TO DISCUSS THE
ENDANGERED SPECIES ACT. OUR COMMENTS ARE BASED ON ISSUES
PRESENTED IN OUR DRAFT REPORT ENTITLED "MAJOR CHANGES
NEEDED TO MAKE THE ENDANGERED SPECIES PROGRAM WORKABLE."

COPIES OF THE DRAFT WERE PROVIDED TO THE SECRETARY OF THE
INTERIOR ON MARCH 12, 1979, FOR REVIEW AND WRITTEN COMMENT.
HIS RESPONSE IS DUE BY APRIL 11, AND WE SHOULD ISSUE THE
FINAL REPORT IN MAY. MY STATEMENT HERE TODAY WILL HIGH-
LIGHT THOSE ISSUES IN OUR DRAFT REPORT REQUIRING CONGRES-
SIONAL ACTION.

LEGISLATIVE STATUS OF THE ENDANGERED SPECIES PROGRAM

A COMPLEX, EMOTIONAL ENVIRONMENTAL ISSUE, DELIBERATED
AND ACTED ON BY THE 95TH CONGRESS, INVOLVED HOW THE BENE-
FITS OF NATIONAL ECONOMIC GROWTH AND DEVELOPMENT SHOULD

BE WEIGHED AGAINST THE IMPORTANCE OF PROTECTING ENDANGERED AND THREATENED SPECIES. THE ENDANGERED SPECIES ACT AMENDMENTS OF 1978 ESTABLISHED A HIGH-LEVEL ENDANGERED SPECIES COMMITTEE AUTHORIZED TO GRANT EXEMPTIONS FROM THE PROTECTIVE PROVISIONS OF THE ENDANGERED SPECIES ACT. THE 1978 AMENDMENTS ALSO EXTENDED THE AUTHORIZATION FOR APPROPRIATIONS UNDER THE ACT THROUGH MARCH 31, 1980.

SUMMARIZATION OF DEFICIENCIES IDENTIFIED

OUR REVIEW SHOWED THAT, WHILE ADDITIONAL LEGISLATIVE CHANGES ARE NEEDED, THE DEPARTMENT OF THE INTERIOR MUST MAKE MAJOR PROGRAM MANAGEMENT IMPROVEMENTS TO PROVIDE GREATER PROTECTION TO ENDANGERED AND THREATENED SPECIES WHILE MINIMIZING THEIR IMPACT ON FEDERAL, STATE, AND PRIVATE PROJECTS AND PROGRAMS. WE IDENTIFIED SERIOUS MANAGEMENT DEFICIENCIES IN THE THREE PROCESSES USED BY INTERIOR TO PREVENT THE ENDANGERMENT AND EXTINCTION OF PLANTS AND ANIMALS CAUSED BY MAN'S INFLUENCE. THESE PROCESSES ARE (1) LISTING SPECIES AS ENDANGERED OR THREATENED, (2) CONSULTING WITH OTHER FEDERAL AGENCIES, AND (3) RECOVERING LISTED SPECIES. DEFICIENCIES IN THESE PROCESSES HAVE JEOPARDIZED THE EXISTENCE OF SOME ENDANGERED AND THREATENED SPECIES AND RESULTED IN THE POSSIBLE SELECTIVE EXTINCTION OF OTHERS; CREATED UNNECESSARY CONFLICTS BETWEEN ENDANGERED AND THREATENED SPECIES AND FEDERAL, STATE, AND PRIVATE PROJECTS AND PROGRAMS; DELAYED CONSULTATIONS WITH OTHER

FEDERAL AGENCIES TO RESOLVE CONFLICTS, INCREASING PROJECT COSTS; AND HINDERED EFFORTS TO PROTECT AND RECOVER ENDANGERED AND THREATENED SPECIES.

SINCE INTERIOR IS IN THE PROCESS OF COMMENTING ON OUR DRAFT REPORT, WE HAVE NOT YET FINALIZED OUR RECOMMENDATIONS. HOWEVER, AT YOUR REQUEST, WE WOULD LIKE TO HIGHLIGHT OUR RECOMMENDATIONS FOR AMENDING THE ENDANGERED SPECIES ACT WHICH WE BELIEVE WOULD PROVIDE ADEQUATE PROTECTION TO ENDANGERED AND THREATENED SPECIES WHILE MINIMIZING THEIR IMPACT ON FEDERAL, STATE, AND PRIVATE PROJECTS AND PROGRAMS. SPECIES SHOULD BE LISTED AS ENDANGERED OR THREATENED THROUGHOUT THEIR EXISTING RANGES

OUR FIRST RECOMMENDATION WOULD LIMIT LISTINGS TO SPECIES WHICH ARE ENDANGERED OR THREATENED THROUGHOUT ALL OR A SIGNIFICANT PORTION OF THEIR EXISTING RANGES, THAT IS, IN AREAS WHERE THEY ARE NOW LIVING. WE FOUND THAT INTERIOR'S FISH AND WILDLIFE SERVICE IS LISTING POPULATIONS OF SPECIES IN LIMITED GEOGRAPHICAL AREAS AS ENDANGERED OR THREATENED INSTEAD OF LISTING THE ENTIRE SPECIES. THIS HAS OCCURRED BECAUSE THE SERVICE HAS INTERPRETED THE DEFINITION OF "SPECIES" TO INCLUDE POPULATIONS, REGARDLESS OF THEIR SIZE, LOCATION, OR TOTAL NUMBERS. USING THE SERVICE'S INTERPRETATION OF THE TERM, SQUIRRELS IN A SPECIFIC CITY PARK COULD BE LISTED AS ENDANGERED EVEN THOUGH THERE IS AN

ABUNDANCE OF SQUIRRELS IN OTHER PARKS IN THE SAME CITY AND ELSEWHERE. SUCH LISTINGS HAD INCREASED THE NUMBER OF POTENTIAL CONFLICTS BETWEEN ENDANGERED AND THREATENED SPECIES AND FEDERAL, STATE, AND PRIVATE PROJECTS AND PROGRAMS.

THE SERVICE BEGAN USING THE SPECIES DEFINITION IN 1967 TO LIST POPULATIONS IN BROAD GEOGRAPHICAL AREAS AS ENDANGERED OR THREATENED AND TO LIST SPECIES AS ENDANGERED IN SOME AREAS AND THREATENED IN OTHERS. THESE TYPES OF LISTING ARE USED BY THE SERVICE TO PROVIDE DIFFERENT DEGREES OF PROTECTION TO SPECIES BASED ON THEIR STATUSES WITHIN GIVEN GEOGRAPHICAL AREAS. FOR EXAMPLE, THE GRIZZLY BEAR POPULATION IN THE 48 CONTERMINOUS STATES WAS LISTED AS THREATENED IN JULY 1975, WHILE THE ALASKAN POPULATION WAS LEFT UNPROTECTED BY THE ACT. THE SERVICE THEN PUBLISHED REGULATIONS WHICH PERMIT THE GRIZZLY TO BE TAKEN ONLY FOR APPROVED SCIENTIFIC AND CONSERVATION PURPOSES IN WYOMING AND IDAHO, BUT PERMIT SPORT HUNTING OF THE SPECIES IN NORTH-WESTERN MONTANA.

IN FISCAL YEAR 1978, THE SERVICE BEGAN LISTING OR PROPOSING FOR LISTING MORE GEOGRAPHICALLY LIMITED POPULATIONS. FOR EXAMPLE, THE FLORIDA POPULATION OF THE PINE BARRENS TREE FROG WAS LISTED AS ENDANGERED IN NOVEMBER 1977, WHEN ITS OVERALL STATUS IN THE FOUR STATES IN WHICH IT EXISTS WAS NOT KNOWN. THE LISTING MAY CONFLICT WITH LAND DEVELOPMENT AND AGRICULTURE IN WESTERN FLORIDA. ALSO, IN AUGUST 1978, THE BEAVER DAM SLOPE POPULATION OF THE DESERT TORTOISE IN UTAH WAS PROPOSED FOR LISTING AS ENDANGERED

BEFORE A SURVEY TO DETERMINE THE OVERALL STATUS OF THE SPECIES WAS BEGUN. IF THE BEAVER DAM SLOPE POPULATION IS LISTED IT COULD ELIMINATE OR MODIFY BUREAU OF LAND MANAGEMENT LIVESTOCK GRAZING ACTIVITIES IN THE AREA.

THE 1978 AMENDMENTS TO THE ACT REDEFINE THE TERM "SPECIES" TO EXCLUDE DISTINCT POPULATIONS OF INVERTEBRATES, SUCH AS, SNAILS AND INSECTS. HOWEVER, THE NEW DEFINITION WILL NOT AFFECT THE LISTING OF GEOGRAPHICALLY DISTINCT POPULATIONS OF VERTEBRATES, SUCH AS THE TREE FROG AND DESERT TORTOISE. THEREFORE, WE ARE RECOMMENDING THAT THE CONGRESS REDEFINE THE TERM "SPECIES" TO EXCLUDE ALL DISTINCT POPULATIONS. THIS WOULD LIMIT LISTINGS TO ENTIRE SPECIES, RATHER THAN LIMITED GEOGRAPHICAL POPULATIONS.

PERMANENT EXEMPTIONS SHOULD COVER
ONGOING CONSTRUCTION PROJECTS

OUR SECOND RECOMMENDATION WOULD AMEND SECTION 7 OF THE ACT TO MAKE IT CLEAR THAT THE ENDANGERED SPECIES COMMITTEE IS AUTHORIZED TO GRANT A PERMANENT EXEMPTION TO ANY FEDERAL PROJECT. THE 1978 AMENDMENTS TO SECTION 7 MAY NOT PROVIDE FOR THE TIMELY RESOLUTION OF ALL CONFLICTS BECAUSE THEY MAY BE READ TO EXCLUDE PERMANENT EXEMPTIONS FOR THOSE FEDERAL PROJECTS WHICH HAD BEEN COMMITTED TO OR WERE UNDER CONSTRUCTION AT THE TIME THE 1978 AMENDMENTS WERE ENACTED. FOR THESE PROJECTS, THE LENGTHY CONSULTATION PROCESS MAY HAVE TO BE INITIATED AND THE PROJECT STOPPED EACH TIME AN AFFECTED SPECIES IS LISTED AND A POTENTIAL CONFLICT IS IDENTIFIED.

AN EXAMPLE OF A FEDERAL PROJECT FOR WHICH THE 1978 AMENDMENTS DO NOT MAKE CLEAR WHETHER A PERMANENT EXEMPTION MAY BE GRANTED IS THE COLUMBIA DAM PROJECT ON THE DUCK RIVER IN TENNESSEE, WHICH HAS BEEN STOPPED BECAUSE THREE SPECIES OF MUSSELS WERE LISTED AS ENDANGERED AND A JEOPARDY BIOLOGICAL OPINION WAS RENDERED. CONSTRUCTION, ESTIMATED TO COST OVER \$142 MILLION WHEN COMPLETED, HAS BEEN HALTED WITH THE PROJECT ABOUT 55 PERCENT COMPLETE AND MAY NOT START AGAIN UNLESS THE CONFLICT CONCERNING THE ENDANGERED SPECIES IS RESOLVED OR AN EXEMPTION IS GRANTED. EVEN IF PROJECT CONSTRUCTION IS RESUMED, OTHER SPECIES IN THE DAM AREA MAY BE LISTED LATER. THIS IN TURN MAY TRIGGER ANOTHER PROJECT STOPPAGE AND FURTHER LENGTHY CONSULTATIONS.

THE NUMBER OF POTENTIAL CONFLICTS BETWEEN FEDERAL PROJECTS AND PROGRAMS AND ENDANGERED AND THREATENED SPECIES WILL INCREASE IN THE YEARS AHEAD AS MORE SPECIES ARE LISTED AND AS THEIR CRITICAL HABITATS ARE SPECIFIED. THE SERVICE ESTIMATES THAT BETWEEN 50 AND 100 FEDERAL AGENCIES COULD EVENTUALLY BE AFFECTED. THERE WILL INEVITABLY BE CONFLICTS INVOLVING PROJECTS COMMITTED TO OR UNDER CONSTRUCTION AT THE TIME THE 1978 AMENDMENTS WERE ENACTED. WE ARE RECOMMENDING THAT THE ACT BE AMENDED TO MAKE IT CLEAR THAT THE ENDANGERED SPECIES COMMITTEE IS AUTHORIZED TO GRANT PERMANENT EXEMPTIONS TO FEDERAL PROJECTS COMMITTED TO OR UNDER CONSTRUCTION AT THE TIME THE 1978 AMENDMENTS WERE ENACTED.

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OF COURSE, THE ACT WOULD CONTINUE TO REQUIRE THAT THE COMMITTEE RECONSIDER ANY PERMANENT EXEMPTION WHICH WOULD RESULT IN THE EXTINCTION OF A SPECIES. FINALLY, NEITHER THE ACT NOR OUR PROPOSED AMENDMENT PRECLUDE THE CONGRESS FROM EXEMPTING A SPECIFIC PROJECT OR PROGRAM AFTER WEIGHING ITS COSTS AND POTENTIAL BENEFITS AGAINST THE IMPORTANCE OF CONSERVING A SPECIES.

PROTECTION TO SPECIES SHOULD BE INCREASED

OUR FINAL LEGISLATIVE RECOMMENDATION WOULD REQUIRE FEDERAL AGENCIES TO ADEQUATELY CONSIDER THE IMPACT THEIR PROJECTS AND PROGRAMS WILL HAVE ON SPECIES FOR WHICH NOTICES OF INTENT TO REVIEW OR PROPOSED LISTING REGULATIONS HAVE BEEN PUBLISHED IN THE FEDERAL REGISTER.

THE ENDANGERED SPECIES ACT REQUIRES FEDERAL AGENCIES TO CONSULT WITH THE SERVICE WHENEVER AN ACTION MAY AFFECT A LISTED SPECIES OR ITS CRITICAL HABITAT AND TO CONDUCT A BIOLOGICAL ASSESSMENT TO IDENTIFY ANY LISTED OR PROPOSED SPECIES WHICH IS LIKELY TO BE AFFECTED BY AN ACTION. AS OF OCTOBER 1, 1978, 236 U.S. SPECIES HAD BEEN LISTED BY THE SERVICE AS ENDANGERED OR THREATENED. AT THE SAME TIME, THERE WERE OVER 600 SPECIES IDENTIFIED FOR LISTING, INCLUDING ABOUT 45 SPECIES FOR WHICH THE SERVICE WAS DEVELOPING PROPOSED LISTING REGULATIONS. HOWEVER, BY LIMITING SECTION 7 CONSULTATIONS TO LISTED SPECIES AND BY NOT

REQUIRING THAT BIOLOGICAL ASSESSMENTS INCLUDE SPECIES FOR WHICH NOTICES OF REVIEW HAVE BEEN PUBLISHED, THE ACT PERMITS FEDERAL PROJECTS AND PROGRAMS TO CONTINUE WHICH MAY JEOPARDIZE THE SURVIVAL OF SPECIES IDENTIFIED FOR LISTING BY THE SERVICE.

FOR EXAMPLE, A CORPS OF ENGINEERS PROJECT IN THE SACRAMENTO RIVER, CALIFORNIA, CONTINUES TO DISPOSE OF DREDGE SPOILS ON THE CRITICAL HABITAT OF A PROPOSED ENDANGERED BEETLE. (THE SACRAMENTO ANTHICID BEETLE.) A PETITION TO LIST THE SPECIES WAS ACCEPTED BY THE SERVICE IN APRIL 1976, AND A PROPOSAL TO LIST THE BEETLE AS ENDANGERED AND SPECIFY ITS CRITICAL HABITAT WAS PUBLISHED IN THE FEDERAL REGISTER IN AUGUST 1978.

WE ARE RECOMMENDING THAT SECTION 7 OF THE ACT BE AMENDED TO ALLOW PERMANENT EXEMPTIONS ONLY AFTER BIOLOGICAL ASSESSMENTS HAVE BEEN CONDUCTED THAT INCLUDE SPECIES FOR WHICH NOTICES OF REVIEW OR PROPOSED LISTING REGULATIONS HAVE BEEN PUBLISHED IN THE FEDERAL REGISTER AND THAT CONSULTATIONS ALSO INCLUDE THESE SPECIES.

MR. CHAIRMAN, ATTACHED TO MY STATEMENT IS A DRAFT OF PROPOSED LEGISLATIVE LANGUAGE TO IMPLEMENT OUR RECOMMENDATIONS. (ATTACHMENT I.) THIS CONCLUDES MY PREPARED STATEMENT. WE SHALL BE GLAD TO RESPOND TO ANY QUESTIONS.

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AMENDMENTS TO THE ENDANGERED SPECIES ACT OF 1973,
AS AMENDED, TO INCORPORATE GAO RECOMMENDATIONS

Section 3 (16 U.S.C. 1532) should be amended -

(1) by striking out paragraph (16), and inserting in lieu thereof the following:

(16) The term "species" includes any subspecies of fish, wildlife, or plants.

(2) by inserting the following new paragraphs:

The term "listed species" means any species which has been determined by the Secretary of the Interior or the Secretary of Commerce to be an endangered species or a threatened species and such determination has been published in the Federal Register as a final regulation.

The term "proposed species" means any species for which the Secretary of the Interior or the Secretary of Commerce has published a regulation in the Federal Register proposing that the species be added to the list of species determined to be endangered or to the list of species determined to be threatened.

The term "candidate species" means any species for which the Secretary of the Interior or the Secretary of Commerce has found that substantial evidence has been presented which in his judgment warrants a review of the species for the purpose of adding it to either the list of endangered species or the list of threatened species and such a finding has been published in the Federal Register.

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Section 7 (16 U.S.C. 1536) should be amended -
 (1) by inserting and striking out the following:

INTERAGENCY COOPERATION

Section 7.(a) CONSULTATION. - The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act. Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an 'agency action') does not jeopardize the continued existence of any listed, proposed, or candidate [endangered species or threatened] species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section.

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(b) SECRETARY'S OPINION. - Consultation under subsection (a) with respect to any agency action shall be concluded within 90 days after the date on which initiated or within such other period of time as is mutually agreeable to the Federal agency and the Secretary. Promptly after the conclusion of consultation, the Secretary shall provide to the Federal agency concerned a written statement setting forth the Secretary's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. The Secretary shall suggest those reasonable and prudent alternatives which he believes would avoid jeopardizing the continued existence of any listed, proposed, or candidate [endangered or threatened] species or adversely modifying the critical habitat of such species, and which can be taken by the Federal agency or the permit or license applicant in implementing the agency action.

(c) BIOLOGICAL ASSESSMENT. - To facilitate compliance with the requirements of subsection (a), each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into and for which no construction has begun on the date of enactment of the Endangered Species Act Amendments of 1978, request of the Secretary information whether any listed,

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proposed, or candidate species [which is listed or proposed to be listed] may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any listed, proposed, or candidate [endangered species or threatened] species which is likely to be affected by such action. Such assessment shall be completed within 180 days after the date on which initiated (or within such other period as is mutually agreed to by the Secretary and such agency) and, before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(d) LIMITATION ON COMMITMENT OF RESOURCES. - After initiation of consultation required under subsection (a), neither the Federal agency nor [and] the permit or license applicant shall [not] make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative

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measures which would avoid jeopardizing the continued existence of any listed, proposed, or candidate [endangered or threatened] species or adversely modifying or destroying the critical habitat of any such species.

(g) APPLICATION FOR EXEMPTION AND CONSIDERATION BY REVIEW BOARD. - (1) A Federal agency, the Governor of the State in which an agency action will occur, if any, or a permit or license applicant may apply to the Secretary for an exemption for an agency action of such agency if, after consultation under subsection (a), the Secretary's opinion under subsection (b) indicates that the agency action may jeopardize the continued existence of any listed, proposed, or candidate [endangered or threatened] species or destroy or adversely modify the critical habitat of such species. An application for an exemption shall be considered initially by a review board in the manner provided in this subsection, and shall be considered by the Endangered Species Committee for a final determination under subsection (h) after a report is made by the review board. The applicant for an exemption shall be referred to as the 'exemption applicant' in this section.

(5) It shall be the duty of a review board appointed under paragraph (3) to make a full review of the consultation carried out under subsection (a), and within 60 days

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after its appointment or within such longer time as is mutually agreed upon between the exemption applicant and the Secretary, to make a determination, by a majority vote, (1) whether an irresolvable conflict exists and (2) whether such exemption applicant has -

(A) carried out its consultation responsibilities as described in subsection (a) in good faith and made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which will avoid jeopardizing the continued existence of listed, proposed, or candidate [endangered or threatened] species or result in the adverse modification or destruction of a critical habitat;

(B) conducted any biological assessment required of it by subsection (c); and

(C) refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d).

Any determination by the review board that an irresolvable conflict does not exist or that the exemption applicant has not met the requirements of subparagraph (A), (B), or (C) shall be considered final agency action for purposes of chapter 7 of title 5 of the United States Code.

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(h) EXEMPTION. - (1) The Committee shall make a final determination whether or not to grant an exemption within 90 days of receiving the report of the review board under section (g)(7). The Committee shall grant an exemption from the requirements of subsection (a) for an agency action if, by a vote of not less than five of its members voting in person -

(A) it determines on the record, based on the report of the review board and on such other testimony or evidence as it may receive, that -

(i) there are no reasonable and prudent alternatives to the agency action;

(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest; and

(iii) the action is of regional or national significance; and

(B) it establishes such reasonable mitigation and enhancement measures, including, but not limited to, live propagation, transplantation, and habitat acquisition and improvement, as are necessary and appropriate to minimize the adverse effects of the agency action upon the listed, proposed, or candidate [endangered species, threatened] species, or critical habitat concerned.

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Any financial determination by the Committee under this subsection shall be considered final agency action for purposes of chapter 7 of title 5 of the United States Code.

(2)(A) Except as provided in subparagraph (B), an exemption for an agency action granted under subsection (h) shall constitute a permanent exemption with respect to all listed, proposed, or candidate [endangered or threatened] species for the purposes of completing such agency action: Provided, That a biological assessment has been conducted as required by [under] subsection (c) or voluntarily conducted in accordance with subsection (c).

(B) An exemption shall not be permanent under subparagraph (A) if the Secretary finds, based on the best scientific and commercial data available, that such exemption would result in the extinction of the species. If the Secretary so finds, the Committee shall determine within 30 days after such finding whether to grant an exemption for the agency action notwithstanding the Secretary's finding.

THE INTERNATIONAL PRIMATE PROTECTION LEAGUE

Headquarters: P.O. BOX 546
Berkeley, CA 94701 U.S.A.

REPRESENTED IN BANGLADESH . BRAZIL . BURMA . CAMEROUN . CANADA . GHANA . HONG KONG INDIA . JAPAN . LIBERIA . NETHERLANDS . PAKISTAN . PERU . SINGAPORE S. AFRICA . SPAIN . TAIWAN . TANZANIA . THAILAND . U.K. . U.S.A. . VIETNAM	C.C.P. DR. SHIRLEY MCGREAL ARDITH A. EUDEY
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MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I am Shirley McGreal, Co-Chairwoman of the International Primate Protection League, an organization which works for the conservation and protection of the world's primate populations.

I wish to thank the Chairman and members of the Subcommittee for the opportunity to present my organization's views. The International Primate Protection League supports the proposed authorizations for continuation of the Endangered Species Act, but believes that more money should be appropriated, especially for law enforcement activities.

Primates, Man's closest living relatives, are disappearing at so fast a rate that many are now extinct. Over 70 primate species already appear on the U.S. Endangered List. Primates are threatened by human activities such as forest destruction, hunting for food, and capture for zoos, laboratories, and the pet trade. Many primates enter the trade after violent and brutal capture episodes, frequently involving the shooting of a mother primate to capture her baby. Because of the great demand for live primates, many species have been the target of international wildlife smugglers.

The United States Endangered Species Act has contributed significantly to reduction of wasteful and illicit trade in primates. The gibbons of Southeast Asia are an example of a primate family which has received considerable protection because of the provision of the Endangered Species Act requiring permits for the importation of wildlife listed under the Act.

Gibbons are traditionally caught by the mother-killing method. Since they live high in the trees and are small and extremely active, several gibbon mothers and infants are shot or die in the fall from the trees for each infant successfully brought into captivity. Because of the fragility of gibbons, a large proportion of the captured infants die. Jean-Yves Domalain, the former wildlife smuggler who wrote the book "The Animal Connection", has estimated that at least 20 mothers and infants die for each gibbon that enters captive life. Even in captivity, so many gibbons die that replacement animals are constantly required. Of six white-handed gibbons imported by a major U.S. zoo between 1960 and 1966, none survived longer than 3 months. Two crippled gibbons, presumably injured when their mothers were shot, were returned to the supplier.

Southeast Asian nations have extended legal protection to their gibbon populations for many years. However, this protective legislation was repeatedly circumvented until all gibbon species were added to the U.S. Endangered Species List on 14 June 1976. Gibbon traffickers used "laundry countries" such as Singapore, to redistribute animals illegally obtained from gibbon habitat countries. Singapore is a small, developed, island nation which has no gibbon populations. However, poached gibbons would be shipped from Singapore to the United States and other nations on documents issued by the Government of Singapore.

In November 1975, I was able to infiltrate two of Singapore's leading gibbon smugglers. One told me that he moved gibbons from Thailand to Malaysia in false petrol tanks under trucks. The sufferings of the animals in their stuffy compartments as they rode for 3 days over rough roads can only be imagined. The other trader stated that he obtained his gibbons from a network of sailors on small coastal freighters which carry goods between Southeast Asian nations.

Fifty-one shipments totalling 166 gibbons (representing the deaths of at least 3,000 mothers and infants) reached the United States from Singapore in 1973 and 1974. Five U.S. animal dealers imported 48 of the 51 shipments. Since these shipments were in violation of the laws of the countries of origin, they were in violation of certain provisions of the Lacey Act. However, the Fish and Wildlife Service claimed these provisions to be unenforceable for animal shipments from most areas of the world.

The situation changed when the gibbon was added to the U.S. Endangered List. Between 14 June 1976, the date of the addition, and 31 December 1978, the last date for which I have studied the Form 3-177 import declaration for primates, not a single gibbon has entered the United States from Singapore. No importer would dare seek a permit to import "Singapore Connection" gibbons from the Federal Wildlife Permit Office. The wisdom of the U.S. Congress in requiring importation permits for endangered animals has thus saved thousands of gibbon mothers and infants from brutal deaths and helped assure the survival of these wonderful acrobatic apes.

In 1976, 685 Cottontop marmosets reached Miami and were declared as having originated in Paraguay, even though this species only occurs in Panama and Colombia, far to the north of Paraguay. It is likely that the animals originated in Colombia which accords full legal protection to Cottontop marmosets and bans their export. Although these shipments also appeared to violate the Lacey Act, all were cleared by the Fish and Wildlife Service in Miami. They only came to an end with the addition of the Cottontop marmoset to the U.S. Endangered Species List on 19 October 1976.

Many other endangered primate species such as the gorilla, orang-utan, and Golden-lion marmoset have benefitted from the provisions of

the U.S. Endangered Species Act. It is vital that funds be appropriated to continue the implementation of the trade control functions of the Endangered Species Act as carried out by the Federal Wildlife Permit Office.

The International Primate Protection League believes that increased appropriations would enable the Office of Endangered Species to process proposals to add species to the Endangered List more rapidly. In some cases, proposal of a species for addition to the list causes animal dealers and their customers to stockpile the species in question. On 13 April 1976, 27 primate species were proposed for addition to the U.S. Endangered List. 26 of these species were added to the list on 19 October 1976, and, 30 days later, trade in the species fell under regulation. This was 7 months after the publication of the proposed additions in the Federal Register. This seven-month delay unfortunately allowed dealers to stockpile several of the species, including the chimpanzee and the cottontop marmoset. A pricelist issued in August 1976 by the International Animal Exchange, a Ferndale, Michigan, animal dealer, announced, "Must sell Immediately-call collect" twelve juvenile chimpanzees at a cost of \$2,000 per animal. No less than 37 infant chimpanzees passed through the RSPCA Animal Hostel at Heathrow Airport, London, in June 1976. In addition, at least 779 Cottontop marmosets passed through the Port of Miami between April and November 1976.

It would be nice to think that animal dealers and purchasers would voluntarily restrict importation of species proposed for addition to the U.S. Endangered List. However, the unfortunate truth is that some dealers appear to use published proposals as "shopping lists". IPPL believes that this kind of last-minute trading has the potential to cause serious harm to species already identified as in trouble and in need of protection. We therefore

recommend increased funds for the Office of Endangered Species so that more scientific staff can be hired to work on keeping the Endangered List up to date.

The smuggling of endangered wildlife is an immensely profitable racket with animal traders seeking out rare animals and birds from all corners of the world. IPPL therefore believes that more funds and manpower must be made available to stop this trade. As the smuggler Domalain said, the animal business is almost as profitable as the narcotics trade but has the advantage of being almost risk-free. The most likely punishment in the rare case where action is taken against a smuggler is a tiny fine for a transaction which has netted the dealer tens of thousands of dollars.

I have discussed the current enforcement situation with Fish and Wildlife Service agents at several ports of entry. At the present time, there are not enough agents available to check each incoming shipment of wildlife or wildlife products carefully. The Port of Miami has only 3 port inspectors and the Port of New York 11. Yet a constant stream of wildlife shipments flows in through these ports night and day. More manpower is clearly needed. In addition, training programs emphasising species identification and scientific investigative methods must be developed for Fish and Wildlife Service port agents.

Although the Endangered Species Act has done much to curtail illegal importation of endangered wildlife to the United States, it is likely that animal dealers are still resorting to the old trick of stuffing endangered animals, often drugged, into snake crates, and labelling them as "Spitting Cobras" or "Dangerous Reptiles." Such crates deter all but the most intrepid wildlife officer from inspecting the crate closely. One Thai dealer has repeatedly performed this trick, once going so far as to

write on the invoice which accompanied one shipment to the United States the notation "2 Hylobates lar (gibbons) in snake crate." This shipment entered the United States with no complications. IPPL was therefore pleased to learn that Dr. Peter Dollinger of Switzerland's Federal Veterinary Office, has invented a device which permits an official to inspect the interior of a snake crate without opening it. Such devices, as well as other modern detection equipment, should be made available to Fish and Wildlife Service agents at all ports of entry.

Section 8 of the Endangered Species Act of 1973 makes possible the participation of the United States in a variety of foreign programs and activities to help ensure the survival of endangered species of wildlife. It is to be hoped that, in the future, ways can be found for more projects of benefit to primates to be funded under the Act.

In conclusion, IPPL believes that the U.S. Endangered Species Act has already made a significant contribution to the conservation and protection of the world's wild primate populations. However, there are serious loopholes in the Act which should be closed, and the International Primate Protection League hopes to have the opportunity to discuss these at oversight hearings later this year.

I will be pleased to answer any questions you might have.

STATEMENT
OF THE
NATIONAL FOREST PRODUCTS ASSOCIATION
ON
REAUTHORIZATION HEARINGS FOR THE ENDANGERED SPECIES PROGRAM
BEFORE THE
SENATE ENVIRONMENT AND PUBLIC WORKS SUBCOMMITTEE
ON
RESOURCE PROTECTION

APRIL 2, 1979

The National Forest Products Association (NFPA), headquartered in Washington, D.C., is a federation of 29 regional and wood products associations and 15 direct member companies. We represent more than 2,000 companies concerned with timber growing and the manufacture and wholesale of wood products throughout the United States.

The forest industry is concerned with timber management on all commercial forest lands, whether the ownership is federal, state, industrial, or non-industrial. We support programs and projects at all levels which lead to constructive and productive management of the nation's forest lands, including programs which protect environmental values.

The forest industry supports the concept of conserving flora and fauna as set forth in the Endangered Species Acts of 1966, 1969 and 1973. However, there are a number of changes in the Endangered Species Act which are appropriate because of problems which have become apparent in recent years.

We believe the Endangered Species Program should be reauthorized, but we have reservations about the length of the reauthorization under consideration. If concerns about the Act are not to be addressed by substantive amendments at this time,

we suggest that reauthorization be only for that part of fiscal 1980 not currently authorized.

If Congress chooses to extend the Program for three years, we request that a number of amendments be considered at this time which address those concerns not covered by the amendments of 1978. We believe that there are still changes to be made which will insure that the Endangered Species Act continues as a strong and accepted force for the conservation of plants and animals. Areas which we feel need attention are as follows.

Section 7 Changes

We suggest that Section 7 of the Act needs further refinement. The basic problems regarding Section 7 of the Act still persist. There is insufficient consideration of national goals and objectives other than conservation of listed species and their critical habitats. Biological findings that species are endangered or threatened are coupled with political decisions as to which of several possible national goals is the most needed. Consultation requirements lead to many thousands of consultations each year, and there is no method for relieving small operations from the strictures of Section 7. The changes in Section 7 made last year were a step in the right direction, but the process is still inadequate because the exemption process comes too late in the process of weighing objectives and priorities.

A. We suggest that changes be made which uncouple the biological process of determining the status and habitat protection

needs of plants and animals from the political decisions necessary for making choices among alternative courses of action.

B. The consultation process would be improved if agencies with biological expertise were required to consult only in selected circumstances, as for example when an action might reasonably be expected to result in extinction of a species or when the action is of such magnitude as to warrant the expenditure of the extra resources for full-fledged interagency consultation.

C. When the Fish and Wildlife Service believe consultation is needed, it should be expected that the Service will support and direct any studies required in order to render a biological opinion. If the federal agency involved is funding or authorizing the activity for which consultation is requested, the consultation should be between the Service and the party actually carrying out the activity, with information copies to the agency.

The "Taking" Problem

The word "take" is defined in the statute in terms, among others, of "harm" and "harass." The Act does not define these latter two words, but they are further described in regulations issued by the Fish and Wildlife Service. In 50 CFR 17.3, the word "harass" is defined, in part, as an act "which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." The word "harm" means, in part, "acts which annoy . . . to such

an extent as to significantly disrupt essential behavior patterns, which include, but are not limited to, breeding, feeding, or sheltering; significant environmental modification or degradation which has such effects is included within the meaning of 'harm'."

We agree that purposeful and malicious activities must be prohibited, but we feel that the term "take" as currently defined in the statute and regulations can be enforced so as to preclude normal land management practices undertaken with no intent to affect a listed species or habitat adversely. It would be possible for a criminal sanction to be imposed against a private landowner for carrying out normal land management practices if these had even an inadvertent impact on a listed species or its critical habitat. This could cripple a landowner's ability to use his land for otherwise lawful purposes which are in the public interest. It is conceivable that the strictures might be construed as an unconstitutional taking of private lands. The proscriptions on environmental modification or degradation in these definitions, together with the citizens' suit provisions of Section 11 for enjoining activities or requiring the Secretary to take action provide an excellent opportunity for mischief-making by those who disagree with land management activities, whether on public or on private lands.

Civil and Criminal Penalties

We understand that 1978 changes in the penalties and enforcement section of the Act were made in response to Justice Department concerns about difficulties in obtaining convictions of persons in the import and export business who were alleged to be

in violation of the Act. This was said to be due to the need to show intent to violate. We agree that those whose principal source of income is derived from the import or export of fish, wildlife, or plants should be held to a high standard of knowledge and conduct regarding plants and animals subject to the provisions of the Endangered Species Act. However, we feel that problems may arise from interpretations of who is considered an importer or exporter, given the present language of the statute. It is not certain from the statute, or from the legislative history, if the new language applies only to those whose principal business is import or export or if applies to anyone who imports or exports as a part of his overall operations. If it is interpreted to mean anyone who happens to import or export, then the question arises as to whether it applies only to those activities connected with import and export of fish, wildlife, and plants, or to any activity undertaken by such a person. We believe that the more encompassing interpretation is likely and the other changes which were made in the standards of culpability will create difficulties which far outweigh the benefits of making convictions easier for the Justice Department to obtain.

Critical Habitat Proposals

The 1978 amendments provide that a proposed rule adding a species to the list of threatened or endangered species must be made a final rule within two years after initial proposal or shall be withdrawn pending the development of further information. Although critical habitat generally will be a part of any such

proposed rule in the future, it will not always be the case; for example, designation of critical habitat for species which are already listed. This defect should be corrected.

Impact Statements

We urge that Congress require those charged with the responsibility for implementing the Endangered Species Act to prepare an economic analysis and an environmental impact statement whenever a species to be listed or designation of its critical habitat could be considered a major federal action with significant effects on the human environment. A decision to dedicate certain areas to a single purpose should only be undertaken with a full knowledge of the economic benefits to be gained or foregone and the environmental effects to be expected and only after the alternatives available have been examined.

Although the presumption is that the Fish and Wildlife Service is subject to the National Environmental Protection Act (NEPA), Executive Order 11949 and OMB Circular A-107, we are not aware of any environmental impact statement or economic impact statement being filed by the Service as the result of a decision to list a species as endangered or threatened or for designation of critical habitat. The claim has been made that the listing of a species' status is not a major federal action. This is simply not true. Once a species is listed, all of the prohibitions in Section 9 come into force and all the provisions of Section 11 are available for enforcement and compliance. In addition, there are the costs associated with the biological

assessments, consultations, and mitigation or enhancement measures required for activities which may affect a listed species or its habitat.

The same is true for designations of critical habitat. Once the designation is final, all the strictures of Section 7 pertaining to the impacts of federal activity - construction, permitting or funding - are brought into play. These restrictions apply not only to future activities, but also to those in progress. To claim in the latter case that designation of critical habitat is only a warning to other agencies and not itself a major federal action with significant effects on the human environment is fatuous. While it might be argued that the Service does not have a veto over the activities of other agencies, court decisions indicate that when there is disagreement over the biological effects of an activity on a listed species or critical habitat, the biological opinion of the Secretary will prevail and the activity stopped or modified.

The changes discussed above will help assure that the Act remains as a tool in the efforts to conserve our native plants and animals and still enable the forest industry to manage and utilize forest lands for other national goals and objectives.

Thank you for this opportunity to present our views on the Endangered Species Act. We offer our services in any way we can to aid the efforts to refine the Act and insure its continued implementation.

Memorandum •

PACIFIC MARINE FISHERIES COMMISSION

REPRESENTING THE STATES OF
ALASKA, CALIFORNIA, IDAHO, OREGON AND WASHINGTON528 S.W. Mill Street, Portland, OR 97201
phone: (503) 229-5840TO : Honorable John C. Culver, Chairman
Subcommittee on Resource Protection

DATE: March 12, 1979

FROM : John P. Harville, Executive Director *JPH*

SUBJECT: FURTHER EXPLANATIONS AND RATIONALE FOR RECOMMENDATIONS

1. Demonstrated values and contributions of Anadromous Fish Conservation Act

Testimony presented by NOAA and USFWS spokesmen and by Mr. Irwin Alperin for the three interstate marine fisheries commissions reviewed and illustrated the significant contributions of cooperative State-Federal programs supported under this Act. We would particularly underscore NOAA testimony concerning increasing application of funds to State-Federal cooperative research and management of anadromous species subject to multiple jurisdiction in the territorial seas of the States and in the offshore Fishery Conservation Zone established under FCMA. We commend and will strongly support the NOAA concluding statement: "In particular, we would like to consider greater orientation toward efforts to complement management and research of ocean fisheries for anadromous species managed under the Fisheries Conservation and Management Act."

We believe the United States Congress should be pleased with the obvious cost-effectiveness of this program. Since most projects have been funded on a 50-50 matching basis, Federal expenditures of some \$60 million since 1967 have generated a comparable amount of matching State money. Government estimates in 1974 indicated a benefit-cost ratio of three or four to one for salmon and striped bass projects;¹ thus this \$60 million investment of federal funds would appear to have generated benefits of the order of \$360 to \$480 million to U.S. citizens and the U.S. economy.

We also would point out that while salmonid fisheries of the Pacific Northwest and Alaska have been the major targets for research and management under this

¹ Fish and Wildlife Misc. Report Part II, Serial 93-18, p. 501, U.S. Govt. Printing Office, 1973.

program, the potential for contributions to all States has increased enormously in recent years. Pacific salmon now contribute extensively to sport fishermen and their supporting economies of the Great Lakes and a growing number of eastern seaboard States. Striped bass fisheries are of major importance to the Atlantic States, and make increasing contributions to the Gulf States. Even inland States now benefit extensively from striped bass fisheries in reservoirs and impoundments. In all these cases, important enabling breakthroughs were made by cooperative State-Federal researches supported in part under the Anadromous Fish Conservation Act.

2. Federal cost-sharing for operation of multi-agency projects

We believe that testimony provided by Administration spokesmen makes an effective argument for authorizing Federal cost-sharing for operation of multi-agency projects, thus extending to them financing capabilities presently available to single-State projects. However, as a means of encouraging development of cooperative multi-State projects, in 1974 Congress amended the Anadromous Fish Conservation Act to authorize up to 66 2/3% Federal sharing in the costs of such cooperative projects [Sec. 1(c)]. We believe this rationale and authorization for up to 66 2/3% Federal sharing should apply to operational costs even as it applies to construction and other kinds of projects.

3. Five year authorization at \$20 million per year

Since the value of the Anadromous Fish Conservation Act has been well-demonstrated and documented over a twelve year period, we recommend that in the interests of economy of effort and resources, the Act be extended for five years through FY 1984. The Congress has the option to modify legislation at any time as a product of oversight hearings. And of course the levels of actual appropriation must be determined annually through the budget process.

As Mr. Alperin pointed out in his March 5 testimony, we heartily commend and support House Committee Chairman John M. Murphy's initiative in seeking reauthorization of this legislation at the \$20 million per year level, and we applaud his

February 8 comments upon introduction of H.R. 2035 that:

"In past years, insufficient funds have been appropriated to cover all the projects proposed by the States. Of the \$20 million authorized each year, only slightly over \$5 million have actually been allocated to the States. With last years' inclusion of Lake Champlain under the coverage of the Act and with the leftover unfunded projects, I feel sure there is a need for the funds authorized by the legislation."

Mr. Culver, we are advised that the backlog of unfunded projects referenced by Chairman Murphy totals more than \$3 million, representing proposals from eight States on all three coastlines. To this backlog of already described projects must be added evolving new requirements for anadromous fish research and management supportive of regional management of these resources in accordance with principles and requirements of FCMA. The extent of our dollar deficit is further exacerbated by the continuing attenuation by inflation of the dollars available to support continuing projects. From all these factors, our real deficit appears to be of the order of \$5 million above the amount requested for FY 1980 by the two responsible federal agencies.

As Mr. Alperin indicated in his testimony, we intend to press very hard with Congressional Appropriations Committees for reasonable augmentation of FY 1980 funding under the Anadromous Fish Conservation Act. Because of the need for fiscal restraint at State as well as Federal levels, we will request only \$2 million augmentation of the NOAA budget, and \$1 million increase in the Fish and Wildlife Service budget. While our needs are far greater than those levels can satisfy, we recognize the need also for a restrained and gradual rate of increase.

Since you and your Subcommittee understand and appreciate the need for augmented funding, particularly toward more effective implementation of FCMA, we are hopeful we shall have your support for these efforts with the Senate Appropriations Committee. We are confident that your recommendations for significant augmentation of funding would carry very great weight with your colleagues on the Appropriations Committee.

Mr. Culver, we know that you and your Subcommittee share our deep concern that the States and Federal fisheries agencies move promptly to better manage fisheries under their multiple jurisdiction in accordance with the National Standards established by FCMA. For anadromous species such as salmon and striped bass, the Anadromous Fish Conservation Act provides by far the best available mechanism for improving the necessary information base, augmenting overall production, and ensuring multi-agency cooperation in overall management.

Toward that objective, we are heartened by Congressional action in 1974 to increase Federal cost-sharing to 66 2/3% "whenever two or more States having a common interest in any basin jointly enter into a cooperative agreement with the Secretary . . . to carry out a research and development program to conserve, develop, and enhance anadromous fishery resources of the nation . . ." [Sec. 1 (c)]. We applaud the expression of Congressional intent to encourage these joint programs as expressed in the Conference Report on the 1974 amendments and extension of the Act:

"The Conferees wish to make it clear that they regard multi-State Federal projects as especially desirable in research, management, and establishment of common stocks of fish occurring in any basin where there is a mutual interest, and in this regard encourage the entering into of multi-State project agreements. Benefits to be realized would include detailed planning of projects by the participating agencies, federally-coordinated results, economy of effort, and reduced costs by reducing duplication as compared to individual State-by-State projects. The Conferees also would like to make it clear that when there are limited funds available with which to carry out this Act, consideration should be given to providing priority for multi-State projects."

(Congressional Record H 6390-6391, July 11, 1974)

We urge that this Congressional intent be reaffirmed in this year's Committee report, and that new funds be made available to permit its effective implementation. We accordingly pledge our full resources to facilitate development of appropriate programs on all our coastlines. For the Pacific Coast and Alaska, we most urgently require more accurate and timely data concerning origins and distribution of salmon stocks from all our States and Canada which are available for harvest from California to Alaska. We also must more accurately assess the differential

impact of ocean harvests on these stocks as a basis for better management of these ocean fisheries.

On the Atlantic and Gulf Coasts, we need a parallel expansion of innovative multi-State programs for enhanced production and improved management of striped bass. These prized food and game fishes can be established as major contributors to major river systems on all coasts, as well as to inland fisheries of lakes and reservoirs. Mr. Alperin's testimony emphasized the need for development of a multi-State and Federal regional management program for striped bass, which live and migrate principally within territorial waters and estuaries of the States.

We believe we can move all these programs forward in the national, regional, and States' interests, given your support for the concept, and if we can secure a reasonable augmentation of Federal funds. Our States are prepared to seek matching funds to assist in these efforts.

4. Greater flexibility in maximum allocations per State

In the original provisions of the Anadromous Fish Conservation Act, Congress quite wisely placed a limit upon the maximum amount that could be expended in any one State--\$1 million per year, which was 20% of the total authorization of \$5 million per year. Since that date, this limitation has remained unchanged, despite a quadrupling of the authorization to \$20 million per year. Additionally the Congress has wisely sought to encourage multi-State cooperative programs [per 1974 amended Sec. 1(c)], which complicates application of this limitation, and thereby discourages multi-State projects in areas where States approach the \$1 million limit.

An illustration of this problem is provided by the State of Washington, a key State due to location and productivity in any coordinated program for multi-State salmon research, enhancement, and management. Projects currently charged to the

State of Washington include the following distribution of funds for FY 1979:

Washington Dept. of Game internal projects	\$155,500
Washington Dept. of Fisheries internal projects	\$544,200
Univ. of Washington Fisheries Research Institute	\$ 49,700
Indian Tribes cooperative projects	
N.W. Indian catch	\$ 42,000
Nisqually River enhancement	112,700
Quinault acoustical counts	50,000
Hoh River enhancement	20,400
Squaxin Is. coho rearing	<u>10,000</u>
Total Indian Tribe projects	\$235,100
TOTAL for the State of Washington	\$984,500

Thus for this key Pacific State, under the current \$1 million limitation, any significant increase in federal dollars either must be ruled out, or very undesirable choices will be forced concerning continuance of on-going agency projects, cooperative projects with Indian tribes, university researches, and potentially important new projects involving cooperation with other Pacific Coast States.

To avoid this potentially serious constraint on innovative program development, and to bring the per-State limitation more in line with current levels of authorization, we strongly urge that the limitation be modified by one of the following alternative approaches:

- a. Modify Sec. 4(b) of the Act to read: "Not more than \$1,000,000 or 20% whichever is greater, of the funds appropriated under this section in any one fiscal year shall be obligated in any one State."

We support this approach as proposed by Administration spokesmen, for the reasons they developed and we have illustrated herewith. We also can accept the fact that some lesser percentage might be applied--e.g. 15%--to relax the restriction, yet still force wider distribution of benefits.

- b. Modify Sec. 4(b) to exempt from the \$1 million limitation any multi-State cooperative projects developed in accordance with Sec. 1(c) of the Act. This could be accomplished by adding the following to Sec. 4(b) after the

word State, "except that additional funds may be applied to multi-State cooperative projects pursuant to Sec. 1(c) of this Act."

This approach would further encourage multi-State cooperative projects as has been the intent of Congress, and certainly would stimulate the kind of regional management approaches we are advocating for State-Federal cooperative research, enhancement and management of such valuable anadromous fisheries as salmon and striped bass, without placing those projects in competition with ongoing in-State programs.

JPH:mjc

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STATEMENT IN SUPPORT OF AUTHORIZING
APPROPRIATIONS FOR THE ENDANGERED SPECIES ACT
IN FY 1980, 81 AND 82 AND TO INCREASE FUNDING
FOR ENFORCEMENT BY \$1.5 MILLION PER YEAR

By Christine Stevens, Secretary

April 27, 1979

On behalf of the Society for Animal Protective Legislation I urge you to act favorably and promptly to add one million dollars each year for enforcement of the law by the Department of the Interior and an added \$500,000 for each year for enforcement by the Department of Commerce. This increased funding is vitally important to curb smuggling and poaching of endangered or threatened animals and products made from these creatures and to bring to justice those who would flout the law.

Recently I received a phone call from Texas alerting our organization to the cutting of the throats of 13 loggerhead turtles, alleged victims of shrimp fishermen off South Padre Island near Corpus Christi. The turtle carcasses washed up on the National Sea Shore a few weeks after an officer of the local shrimp association reportedly told a meeting that the remaining turtles of this threatened species should be killed when they got into shrimp nets.

Sea turtles are in grave danger throughout the world. The Commerce Department needs sufficient funds to enforce the law to protect them effectively. The Department is making an effort as indicated by its recent seizure (12/22/78) of 12,500 pounds of illegal sea turtle meat in Los Angeles, but it is inadequately staffed for enforcement.

The volume of trade in species under the jurisdiction of the Department of the Interior is enormous, but the number of agents assigned to the task of overseeing importation is pitiful.

For example, the Miami airport has only three inspectors to check all incoming shipments of wildlife or animal products on a 24 hour basis seven days a week. Foreign air carriers flying cargo to Miami from Central and South America are notorious for a lack of consistent scheduling and arrival times. The result is that although Miami is one of the ports specified for wildlife to enter, no specialist is on hand most of the time. The weekday daylight flights are covered by FWS inspectors, but the rest of the time the U.S. Customs is left in charge without the benefit of advice from wildlife biologists.

Even in New York, the biggest port of entry, there are only eleven FWS agents. As for the borders where large scale smuggling is known to occur, Interior has only an occasional individual. Attached is an article from the El Paso Times in which the only employee of the Fish and Wildlife Service in the area is shown with a truckload of confiscated furs worth more than a million dollars. Endangered Species were part of the booty of a gang of indiscriminate trappers and smugglers who ruthlessly stripped the skins from any furry creature they could get their hands on, from the endangered Mexican Lynx to people's pet cats.

In this case, Interior worked with other agencies to seize the illegal furs. A lone agent obviously could not have done it by himself. Nor can he or others like him put a stop to the smuggling of endangered parrots and other exotic birds over the border. Those bringing in birds to sell in the United States, resort to such incredible methods as stuffing them into the hubcaps of automobiles or into stockings tied to a person's body. The nesting trees are often cut down to gain access to baby parrots, thus destroying the future generations at one stroke.

Bird smuggling must be stopped to prevent extinction of species. It must also be stopped to prevent continued invasion of Exotic Newcastle Disease which has already cost the taxpayer over \$100 million dollars.

A recent UPI report, points out that in California alone the disease has resulted in the death of 12 million birds and has wrought havoc on the state's enormous poultry industry. A 124 member Newcastle task force is now destroying entire stocks of birds. According to the report, "Dr. William Dieterich, a veterinarian working with the task force said all of the originally confirmed cases of the disease were found in birds sold by Parrot World, a store in Garden Grove, California. He said the task force is now trying to trace 450 birds sold by the store since January 1 and is investigating the shop's exotic bird sources". (The Minneapolis Star, March 12, 1979)

In keeping the Fish and Wildlife Service inspectors at a "starvation" level, the federal government is giving the go-ahead to illegal interests whose activities result in wasting massive amounts of money. This fact alone should result in the necessary action by the Congress and the Office of Management and Budget to provide the necessary enforcement funds to the FWS.

The penny wise and pound foolish approach to enforcement of the Endangered Species Act is contributing to extinction of such beloved species as the Asian elephant, the favorite of millions of little children, an animal that inspires respect and even awe from those who have studied its individual members.

The examination and coordination of documents accompanying shipment of ivory into our country is totally inadequate. For example, during the six-month period, July to December, 1978, 54% of the ivory import documents (FWS 3-177 forms) list a country of origin which cannot legally be the origin of the ivory. Forty-five of the 184 documents, which were available at the Port of New York,

simply listed Africa, giving no country at all in that continent. Thirty-four listed Hong-Kong and thirteen India. If the elephants from which the ivory was taken were indeed Indian, the ivory was illegal. If not, there was no indication of any other country of origin. Further, ivory from countries which have not ratified the Convention in Trade of Endangered Species of Fauna and Flora may not, according to U.S. regulations, be imported into our country, yet a number of the forms listed a non-member nation, Kenya, a country in which illegal wildlife exports were rampant until the recent government crackdown. Obviously, we should be helping Kenya to protect her wildlife from the poachers and smugglers. Looking at the current paper work, the only thing that is clear is that it is impossible to say what is happening.

A recent effort by the Animal Welfare Institute to look into importation of wildlife and its products revealed that at Kennedy International Airport the FWS import documents were stored in cartons stacked in a corner. Some could not be located. The declarations are kept at the port of entry, but the accompanying documentation required from the exporting countries is sent to Washington. Recent efforts by interested conservation groups to match up the separated information proved unsuccessful. Clearly, if the law is to be enforced, proper organization and juxtaposition of import documents is a basic necessity.

This subcommittee's recommendations carry great weight. We hope you will raise the authorization amounts for the Department of Interior to \$24 million for FY 1979, and \$26 million for FY 1980, 81 and 82 and for the Department of Commerce to \$3 million for FY 1979, and \$3.5 million for FY 1980, 81 and 82 and that you will express, in the Committee report, your desire to see vigorous enforcement to prevent extinction of species, and, as a secondary but important effect, to head off waste of government funds which stems from weak enforcement.

In conclusion, we urge that no attempt to amend the Endangered Species Act be made in conjunction with this authorization bill. Amendments being currently suggested by the General Accounting Office appear to be poorly thought out. Any consideration of these or other changes in the substance of the Act should be reserved for oversight hearings.

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